

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

PLR WORLDWIDE SALES LIMITED,
Petitioner

v.

FLIP PHONE GAMES, INC.,
Patent Owner

IPR No. IPR2024-00209

Patent No. 9,427,662

PATENT OWNER'S RESPONSE

TABLE OF CONTENTS

I.	INTRODUCTION.....	1
II.	LEVEL OF SKILL IN THE ART AND EXPERT TESTIMONY	2
III.	PRIORITY DATE.....	3
IV.	BACKGROUND.....	5
	a. Mobile Gaming Technology was Entirely Different Than Today as of the June 26, 2007, Priority Date of the '662 Patent.	5
	b. Petitioner’s Faulty Summary of the State of the Art Relies on Materials that Are Not Prior Art, Not Raised in Any Ground, and that Confirm the Patentability of the Challenged Claims.	8
V.	GROUNDS 1 & 3: NONE OF THE HO GROUNDS RENDERS THE CHALLENGED CLAIMS OBVIOUS	10
	A. Ground 1: Ho, in View of Aoki, Does Not Render the Challenged Claims Obvious	10
	i. Claim 1(a): Ho, in View of Aoki, Does Not Disclose or Suggest “Contacting a Server for Hot Spot Information to Download, Comprising Providing the Server With At Least One of ...”...10	
	ii. Ho, in View of Aoki, Does Not Render Obvious Dependent Claims 2–12	25
	iii. Claim 13(a): Ho, in View of Aoki, Does Not Disclose or Suggest “Contacting a Server for Hot Spot Information to Download, Comprising Providing the Server With User- Identification Information”	26
	iv. Ho, in View of Aoki, Does Not Render Obvious Dependent Claims 14–20	27
	b. Ground 3: Ho, in View of Kim, Does Not Render the Challenged Claims Obvious	28

1)	Claim 1(a): Ho, in View of Kim, Does Not Disclose or Suggest “Contacting a Server for Hot Spot Information to Download, Comprising Providing the Server With At Least One of ...” ...28
i.	Ho, in View of Kim, Does Not Render Obvious Dependent Claims 2–12 28
ii.	Claim 13(a): Ho, in View of Kim, Does Not Disclose or Suggest “Contacting a Server for Hot Spot Information to Download, Comprising Providing the Server With User-Identification Information” 29
iii.	Ho, in View of Kim, Does Not Render Obvious Dependent Claims 14–20 30
c.	Ho is Not “Printed Publication” Prior Art Within the Meaning of 35 U.S.C. § 311(b).....30
VI.	Grounds 2 & 4: NONE OF THE JIAU GROUNDS RENDERS THE CHALLENGED CLAIMS OBVIOUS 33
A.	Ground 2: Jiau, in View of Aoki, Does Not Render the Challenged Claims Obvious 33
1)	Claim 1(b): Jiau, in View of Aoki, Does Not Disclose or Suggest “Downloading Hot Spot Information From the Server ...” 33
i.	Jiau, in View of Aoki, Does Not Render Obvious Dependent Claims 2–12 37
ii.	Claim 13(a): Jiau, in View of Aoki, Does Not Disclose or Suggest “Contacting a Server for Hot Spot Information to Download, Comprising Providing the Server With User-Identification Information” 46
iii.	Claim 13(b): Jiau, in View of Aoki, Does Not Disclose or Suggest “Downloading Hot Spot Information From the Server ...” 53
iv.	Jiau, in View of Aoki, Does Not Render Obvious Dependent Claims 14–20 53

b.	Ground 4: Jiau, in View of Kim, Does Not Render the Challenged Claims Obvious	54
1)	Claim 1(b): Jiau, in View of Kim, Does Not Disclose or Suggest “Downloading Hot Spot Information From the Server ...”	54
i.	Jiau, in View of Kim, Does Not Render Obvious Dependent Claims 2–12	54
ii.	Claim 13(a): Jiau, in View of Kim, Does Not Disclose or Suggest “Contacting a Server for Hot Spot Information to Download, Comprising Providing the Server With User-Identification Information”	55
iii.	Claim 13(b): Jiau, in View of Kim, Does Not Disclose or Suggest “Downloading Hot Spot Information From the Server ...”	56
iv.	Jiau, in View of Kim, Does Not Render Obvious Dependent Claims 14–20	56
VII. CONCLUSION		57

EXHIBIT LIST

Exhibit	Description
2001	Playrix's Exchange of Proposed Terms and Claim Elements for Construction, served January 30, 2024
2002	U.S. Publication No. 2006/0205510 to Lauper et al. ("Lauper")
2003	Joint Claim Construction Statement in <i>Flip Phone Games Inc. v. PLR Worldwide Sales Limited</i> , No. 2:23-cv-00139-JRG (E.D. Tex.), Dkt. 71
2004	Declaration of Henry H. Houh, Ph.D., in Support of Playrix's Proposed Claim Constructions
2005	Prosecution History for U.S. Application No. 11/768,890 (U.S. Patent No. 8,688,089)
2006	Declaration of Dr. Robert Akl, D.SC.
2007	CV of Dr. Robert Akl, D.SC.
2008	Complaint for Patent Infringement, <i>Flip Phone Games Inc. v. PLR Worldwide Sales, Ltd.</i> , No. 2:23-cv-00139-JRG (E.D. Tex.), Dkt. 1

I. INTRODUCTION

Patent Owner Flip Phone Games, Inc. (“FPG” or “Patent Owner”) submits this Response to Petitioner PLR Worldwide Sales Limited’s (“Petitioner”) petition for *inter partes* review (“the Petition”) of U.S. Patent No. 9,427,662 (“the ’662 Patent”) and the Board’s Institution Decision. The Board instituted review of claims 1–20 (the “Challenged Claims”) of the ’662 Patent. But Petitioner has not met its burden of proving unpatentability of any of these claims.

None of the prior art references asserted by the Petitioner discloses each and every limitation of any Challenged Claim. Petitioner thus resorts to arguing that each Challenged Claim is rendered obvious by the prior art. But for a number of limitations of the independent claims, Petitioner fails to provide any documentary evidence in the prior art and instead resorts to speculation, unfounded assumptions, and/or hindsight reconstruction to supply deficiencies in its factual basis. This fatal flaw in Petitioner’s arguments is further demonstrated by the fact that its purported expert, Dr. Zagal, simply repeats Petitioner’s speculative arguments in conclusory fashion. The Federal Circuit has consistently rejected such unsupported and conclusory obviousness challenges. And the same result should follow here.

Petitioner’s faulty approach extends to Petitioner’s challenges to the dependent claims of the ’662 Patent as well. For instance, none of the references discloses or renders obvious downloaded “hot spot information” comprising “a

second hot spot,” as required by claims 12 and 20—which are challenged only in Grounds 3 and 4. Petitioner’s suggestion otherwise is based on pure speculation divorced from the disclosure of the prior art. And, once again, Petitioner’s purported expert, Dr. Zagal, simply repeat’s Petitioner’s speculation without any support or analysis—which is insufficient under controlling precedent.

For these reasons and others discussed herein, Petitioner failed to carry its burden and the Board should affirm the patentability of the Challenged Claims.

II. LEVEL OF SKILL IN THE ART AND EXPERT TESTIMONY

This Patent Owner Response is supported by the expert testimony of Dr. Robert Akl (Ex. 2006), who has decades of experience in the relevant technology area. As Dr. Akl explains, a person of ordinary skill in the art (“POSITA”) of the ’662 Patent would have a bachelor’s degree in electrical engineering, computer engineering, computer science, or a similar field, along with one to two years of experience developing or programming video games or video game systems, or similar types of computer systems. Ex. 2006, ¶29. Alternatively, a POSITA may have additional education that might substitute for some of the experience, and additional experience might substitute for some of the educational background. *Id.*

Petitioner proposes a POSITA definition that includes a person with “an undergraduate degree in game design or development, computer science, computer engineering, or a related field, with at least two years of experience working with

computer gaming systems or software application development.” Petition at 2. Thus, Petitioner does not require experience in developing or programming video games, but only “working with computer gaming systems or software application development.” Petition at 2. This difference does not materially affect the analysis presented below, however.

III. PRIORITY DATE

As recognized by Petitioner, the relevant time for the Board to consider is the claimed priority date of the ’662 Patent: June 26, 2007. *See* Petition at 7. The ’662 Patent is a “continuation” of U.S. Application No. 11/768,890 (the “’890 Application”), which was filed on June 26, 2007. ’662 Patent, at 1:4–6; *see* Ex. 1002 at 111. The ’662 Patent thus shares “substantially the same specification” as the ’890 Application (now U.S. Patent No. 6,688,089). *Two-Way Media Ltd. v. Comcast Cable Commc’ns, LLC*, 874 F.3d 1329, 1332 (Fed. Cir. 2017). *Compare* Ex. 1002 at 118–147, *with* Ex. 2005 at 4–33; *see also* Ex. 2006, ¶22.

Written description support for the Challenged Claims of the ’662 Patent, respectively, is found in at least the following non-limiting portions of the ’890 Application, as filed on June 26, 2007 (Ex. 2005 at 4–48):

'662 Patent, Claim Element¹	'890 Application, as filed June 26, 2007
1(pre)	Abstract, [001], [006]–[014], [016], [017], [029], [030], [035], [039], [041], [049]–[053], [054]–[085], [087]–[100], Figs. 1, 3A–3B, 4A–4B, claims 2, 10, 15, 22
1(a)	[017], [039], [040], [050], [055], [056]–[059], [062], [088], [091]–[096], Figs. 1, 3A–3B, 4A–4B, claims 22, 24, 25
1(b)	[006]–[014], [016], [017], [029], [030], [035], [036], [039], [041], [050]–[051], [072], [089], [098], Figs. 1, 3A–3B, 4A–4B, claims 2, 10, 15, 22
1(b)(1)	[006], [008]–[009], [011], [012], [013], [016]–[017], [029], [030], [035], [036], [039], [041], [050]–[051], [072], [089], [098], Figs. 1, 3A–3B, 4A–4B, claims 2, 10, 15, 22, 23
1(b)(2)	[006], [008]–[009], [010], [029], [048], [078]–[080], [089], Figs. 1, 3A–3B, 4A–4B, claims 1–3
1(c)	[029], [044]–[048], [052], [078]–[080], [089], Figs. 1, 2A–2B, 3A–3B, 4A–4B, claims 1–3
1(d)	[029], [044]–[048], [052], [078]–[080], [089], Figs. 1, 2A–2B, 3A–3B, 4A–4B, claims 1–4
1(e)	[029], [044]–[048], [053], [084]–[085], Figs. 1, 2A–2B, 3A–3B, 4A–4B, claims 1–4
2	Abstract, [011], [017], [029]–[034], [044]–[048], [053], [096], Figs. 2A–2B, claims 1–3, 9, 18, 23
3	[078]–[079]
4	[078]–[080]
5	[029], [044]–[048], [078]–[080], [083], [089], Figs. 2A–2B
6	[029], [046], [084], claim 8
7	[062], [075], [076], [088], [092]
8	[011], [029], [044]–[048], [053], [085], claim 5
9	Abstract, [011], [017], [029]–[034], [044]–[048], [053], [096], Figs. 2A–2B, claims 1–3, 9, 18, 23
10	[053]
11	[053]
12	[082]
13(pre)	(<i>see</i> Claim Element 1(pre))
13(a)	(<i>see</i> Claim Element 1(a))
13(b)	(<i>see</i> Claim Element 1(b))

¹ See Petition at v–viii.

'662 Patent, Claim Element¹	'890 Application, as filed June 26, 2007
13(b)(1)	(<i>see</i> Claim Element 1(b)(1) & 2)
13(b)(2)	(<i>see</i> Claim Element 1(b)(2))
13(c)	(<i>see</i> Claim Element 1(c))
13(d)	(<i>see</i> Claim Element 1(d))
13(e)	(<i>see</i> Claim Element 1(e) & 2)
14	(<i>see</i> Claim Element 2)
15	(<i>see</i> Claim Element 3)
16	(<i>see</i> Claim Element 5)
17	(<i>see</i> Claim Element 6)
18	(<i>see</i> Claim Element 8)
19	(<i>see</i> Claim Element 10)
20	(<i>see</i> Claim Element 12)

IV. BACKGROUND

a. Mobile Gaming Technology was Entirely Different Than Today as of the June 26, 2007, Priority Date of the '662 Patent.

As of the priority date of the '662 Patent (June 26, 2007), the claimed inventions were both novel and non-obvious. *See* Ex. 2006, ¶¶33–47. The Petition ignores the broader context and history of mobile gaming as of 2007, and instead adopts a hindsight-driven viewpoint to suggest that technology that was novel and non-obvious in 2007 was somehow well-known and basic simply because it was used widely thereafter, including today.

The '662 Patent describes and claims an unconventional way of using mobile gaming and mobile gaming devices, involving “providing hot spots of triggered content within the gaming environment of a mobile video game on a mobile communication device,” which “may prolong user interest in a game for a mobile

communication device.” ’662 Patent, at 1:64–2:6; *see* Ex. 2006, ¶¶34–39. The innovative mobile gaming technology described and claimed in the ’662 Patent originates from mobile game developer Mobile Deluxe, which was founded in 2003 and is the precursor of FPG. Ex. 2008, ¶8. At that time, smartphones and modern online stores for smartphone app purchases (“App Stores”) had not been launched, and the mobile gaming landscape was very different than it is today. Ex. 2008, ¶9; *see also* Ex. 2006, ¶¶40–47.

It was not until mid-2008—a full year after the priority date of the ’662 Patent—that modern App Stores became available.² *See* Ex. 2006, ¶41. Before that time, mobile games had a very short life cycle. Ex. 2006, ¶¶42–43. Wireless carriers each managed their own individual app store or “deck,” with a limited catalog of games. *Id.* Once that capacity was reached, the carrier would be forced to remove (or “sunset”) older game titles to make room for new games. *Id.*

As the ’662 Patent describes, “all video games tend to have a popularity life span” and, after the end of that span, “the user may stop playing that particular game in favor of others.” ’662 Patent, at 1:31–35; *see also* Ex. 2006, ¶36. Because of this short life cycle, carriers, developers, and publishers did not update a game during its

² *See, e.g.*, <https://pickaso.com/en/2020/google-play-store-evolution> (“Android’s store that ... launched in 2008 under the name of Android Market, and then renamed Google Play Store.”); <https://www.apple.com/newsroom/2018/07/app-store-turns-10/> (“Apple introduced the App Store on July 10, 2008....”);

lifetime, and there was no expectation a game would evolve. Ex. 2006, ¶46. Rather, mobile games were a one-time purchase, typically \$4.99 to \$9.99 each. Ex. 2006, ¶46. Instead of updating pre-existing mobile games, developers would, for example, launch a sequel to a game, which would be treated by carriers as a new title, triggering a new lifecycle for that new title. Ex. 2006, ¶¶42, 46. Indeed, the '662 Patent explains that “[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, at which point the user may stop playing that particular game in favor of others.” '662 Patent, at 1:31–35; *see also* Ex. 2006, ¶36. Thus, at the time the '662 Patent was effectively filed, mobile games had a limited life cycle, and game developers addressed loss of user interest by releasing new mobile games rather than updating existing mobile games. Ex. 2006, ¶46.

The '662 Patent's claims provide a unique solution to the problem in the field at the time, providing and controlling access to certain content in a mobile video game via a “hot spot,” such that “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),” for example. '662 Patent, at 4:28–39; *see also* Ex. 2006, ¶47. This improvement was groundbreaking at the time and was far from obvious in a 2007, pre-App Store and pre-smartphone world's static approach to mobile gaming. *See* Ex. 2006, ¶¶40–47.

b. Petitioner’s Faulty Summary of the State of the Art Relies on Materials that Are Not Prior Art, Not Raised in Any Ground, and that Confirm the Patentability of the Challenged Claims.

The Petition suggests that “[g]ame developers embraced the idea of updateable games even before mobile games became popular.” Petition at 5. To support this position, however, Petitioner relies on unauthenticated documents that are not prior art, and which, in fact, demonstrate the non-obviousness of the claimed inventions of the ’662 Patent in June 2007.

The Petition relies on Exhibit 1015, an article purportedly published in Australia and entitled “Productive Play 2.0: The Logic of In-Game Advertising.” *See, e.g.*, Petition at 5. Putting aside that Petitioner does nothing to authenticate this article, *it is not prior art*. Indeed, it states on its face that it was published in February 2009, more than a year and half *after* the claimed priority date of the ’662 Patent. *See* Ex. 1015 at 2. Even then, the first paragraph of the article states that “suggestive events for *the future of online gaming* took place in the spring³ of 2007” (Ex. 1015 at 1 (emphasis and footnote added))—confirming that, as of its June 26, 2007, priority date, the invention provided by the ’662 Patent was novel. Ex. 2006, ¶54.

The Petition also relies on Exhibit 1016, a thesis entitled “Advertising in Computer Games.” *See, e.g.*, Petition at 5. While this thesis is stamped with the date

³ Spring in Australia occurs from September to November, *i.e.*, after the June 26, 2007, priority date of the ’662 Patent. <https://www.australia.com/en-us/facts-and-planning/when-to-go/australias-seasons.html>.

September 28, 2006, Petitioner tellingly does not submit any evidence corroborating this date of publication or authenticating the Exhibit. Nor does Petitioner rely on Exhibit 1016 as a prior art reference. Further, as with Exhibit 1015, this thesis states in its abstract that “[t]his paper suggests advertisers should experiment with in-game advertising to gain skills that could become vital in the *near future*.” Ex. 1016 at 2 (emphasis added); *see* Ex. 2006, ¶52.

The Petition next relies on Exhibit 1017, a press release purported to be dated March 21, 2006, and entitled “In-Game Advertising Goes Mobile.” *See, e.g.*, Petition at 5. As with Exhibit 1016, Petitioner submits no evidence corroborating the date of alleged publication or authenticating this Exhibit. Petitioner does not rely on Exhibit 1017 as a prior art reference. Further, as with the other exhibits, Exhibit 1017 states: “In the *near future*, mobile in-game advertising *will become* increasingly attractive for providers of mobile phones.” Ex. 1017 at 1 (emphasis added). Thus, this press release does not describe prior art, but merely describes what may happen in the *future*. *See* Ex. 2006, ¶53.

Finally, the Petition relies on Exhibit 1018, purportedly published in 2001. *See, e.g.*, Petition at 5. But again, Petitioner submits no evidence corroborating the date of alleged publication or authenticating this Exhibit. Exhibit 1018 also similarly confirms that in-game content updates, including with respect to “hot spots,” were not available at the time of the claimed invention of the ’662 Patent. Indeed, Exhibit

1018 describes “[t]he biggest change between the current game technologies *and the future ones* is that in the future it will be possible to offer also games with realtime interactivity.” Ex. 1018 at 50 (emphasis added). Further, this article confirms exactly the need to address the problem that the ’662 Patent in fact solved, describing that “life cycle[s] of [] certain game[s] will [be] quite short, and will be replaced by more trendy games very promptly.” Ex. 1018 at 52; *see also* Ex. 2006, ¶51.

V. GROUNDS 1 & 3: NONE OF THE HO GROUNDS RENDERS THE CHALLENGED CLAIMS OBVIOUS

A. Ground 1: Ho, in View of Aoki, Does Not Render the Challenged Claims Obvious

i. Claim 1(a): Ho, in View of Aoki, Does Not Disclose or Suggest “Contacting a Server for Hot Spot Information to Download, Comprising Providing the Server With At Least One of ...”

Claim 1 recites, *inter alia*, “contacting a server for hot spot information to download, comprising providing the server with at least one of: a game for which hot spot information is desired, a scene for which hot spot information is desired, an element for which hot spot information is desired, the model type of the mobile communication device, the service plan to which the mobile device belongs, the service provider for the mobile communications device, the base location of the mobile communication device, the current location of the mobile communication device, a version identifier for hot spot information currently on the mobile

communication device, user-identification information, preset location, amount of game-play time, game score, and level of play.” See Petition at 21 (claim 1(a)).

Ho, in view of Aoki, fails to disclose or render obvious providing a server with any of the claimed items of information in connection with contacting the server for “hot spot information” to download. See Ex. 2006, ¶¶56–78.

1. *Ho Does Not Render Obvious Claim 1(a)*

Petitioner contends that Ho discloses a “client end device” connecting to a “server” to obtain “interactive information elements” (“i.e., hot spots”) for a game. Petition at 21. And Petitioner suggests that the server “obtain[s]” some unspecified “data from the client end device” to this end. Petition at 21. Proceeding from that ambiguous premise, Petitioner further contends that “[a] POSITA would understand that the data ... may comprise one or more items recited in limitation 1[a].” Petition at 21–22. In particular, Petitioner contends that a POSITA would understand that the data may be (i) “the model type of the mobile communication device”; (ii) “the current location of the mobile communication device”; (iii) the “scene” or “element” “for which hot spot information is desired”; or (iv) “a version identifier” for an interactive information element. *Id.* at 22–24.

Petitioner’s contentions, however, are based entirely on speculation and have no factual foundation in Ho. Fundamentally, Ho discloses “a method [] of playing a video game with at least one interactive information element incorporated within the

game.” Ex. 1004 at 4:4–6. The “interactive information element” may be “an icon in the game, a character in the game or an item in the game.” *Id.* at 4:28–29. If a player engages the “interactive information element,” an action may be “activated,” such as an “on-screen presentation” within the gameplay. *Id.* at 5:27–38. In addition to a method of playing such a video game, Ho discloses “a method for incorporating at least one interactive information element into a video game.” Ex. 1004 at 9:25–26. Ho discloses that a “module” may be “added” to an already-published video game or a video game “in the midst of development.” *Id.* at 9:26–28. The “module” enables an “interactive information element” to be “added” or “updated” to the game by “*automatically* downloading and replacing relevant sub-modules of the interactive information element[] in the video game *whenever the player goes online.*” *Id.* at 9:29–33 (emphasis added); *see id.* at 6:28–36, 9:10–18.

A POSITA would thus understand that Ho teaches that, when a client device goes online, the server in Ho “automatically” “determines whether the interactive information element(s)” is “legitimate” and/or “needs to be changed/renewed,” and then sends interactive information elements to the client device. Ex. 1004 at 9:29–33, 10:14–25, Fig. 5; *see* Ex. 2006, ¶¶58–60. There is no disclosure or suggestion in Ho that the client device in Ho affirmatively contacts and provides to the server any one of the items of information listed in claim 1 of the ’662 Patent in connection with seeking an interactive information element(s). *See* Ex. 2006, ¶¶57–72.

First, Ho does not disclose or suggest having the client device provide the server with “the model type of the mobile communication device” in connection with contacting the server for an interactive information element(s), contrary to Petitioner’s argument. Petition at 23; *see* Ex. 2006, ¶61. Indeed, Petitioner does not cite any portion of Ho that discloses such a submission by the client device. *See id.*

Petitioner simply notes that Ho teaches its game may run on a “mobile telephone” and argues that “a POSITA would have understood or found it obvious to provide the server with the model type of the mobile phone so that [] information that is returned by the server is compatible or optimized for the mobile phone type.” Petition at 23. But Ho makes clear that, when a client device goes “online,” the server in Ho “automatically” determines and sends interactive information elements to the client device—without any affirmative provision of information by the client device to the server. Ex. 1004 at 9:29–33, 10:14–25, Fig. 5; *see* Ex. 2006, ¶61. Moreover, there was especially no need to provide “the model type of the mobile communication device” in connection with contacting the server for Ho’s interactive information element(s) before the June 26, 2007, priority date of the ’662 Patent because, at that time, a mobile game was generally designed for only a specific device. Ex. 2006, ¶61; *see, e.g.*, Petition at 4-5 (discussing Nokia’s game for the Nokia “N-Gage” mobile phone).

Tellingly, the only support Petitioner cites for its argument is the expert testimony of Dr. Zagal. *Id.* (citing Ex. 1003, ¶115). But Dr. Zagal’s testimony simply repeats Petitioner’s argument verbatim and without any support itself. Ex. 1003, ¶115 (“[A] POSITA would have understood or found it obvious to provide the server with the model type of the mobile phone so that the server may return [] information that is compatible or optimized for the capabilities of the mobile phone.”).

A declaration—like Dr. Zagal’s here—that repeats the Petition verbatim “is conclusory and unsupported, adds little to the conclusory assertion for which it is offered to support, and is entitled to little weight.” *Xerox Corp. v. Bytemark, Inc.*, IPR2022-00624, Paper 9, at 15 (P.T.A.B. Aug. 24, 2022). Simply put, an expert declaration—like Dr. Zagal’s here—that “merely parrots the Petition” is entitled to “little to no weight.” *MarkForged Inc. v. Continuous Composites, Inc.*, IPR2022-01431, Paper 7, at 14 (P.T.A.B. Jan. 18, 2023); *Content Square SAS v. Medallia Inc.*, IPR2022-00316, Paper 13, at 38 (P.T.A.B. July 14, 2022) (“Merely repeating an argument from the Petition in the declaration of a proposed expert, does not give that argument enhanced probative value.”).

The Federal Circuit has consistently “rejected obviousness determinations based on conclusory and unsupported expert testimony”—like Petitioner’s challenge here—noting that “crediting such testimony risks allowing the challenger to use the challenged patent as a roadmap to reconstruct the claimed invention using disparate

elements from the prior art—i.e., the impermissible *ex post* reasoning and hindsight bias that *KSR* warned against.” *TQ Delta, LLC v. Cisco Sys., Inc.*, 942 F.3d 1352, 1361 (Fed. Cir. 2019). A petitioner must, instead, supply the factual basis for the challenge and “may not resort to speculation, unfounded assumptions or hindsight reconstruction to supply deficiencies in its factual basis.” *In re Warner*, 379 F.2d 1011, 1017 (C.C.P.A. 1967). Petitioner failed to do so here, however.

The Board “cannot accept” Petitioner’s and Dr. Zagal’s unsupported general speculation “as a replacement for documentary evidence for core factual findings in a determination of patentability.” *K/S Himpp v. Hear-Wear Techs., LLC*, 751 F.3d 1362, 1366 (Fed. Cir. 2014); *see also Xerox*, IPR2022-00624, Paper 9, at 15 (“Dr. Jones does not cite to any additional supporting evidence or provide any technical reasoning to support his statement. Thus, the cited declaration testimony is conclusory and unsupported, adds little to the conclusory assertion for which it is offered to support, and is entitled to little weight.”).

Second, Petitioner’s argument that a POSITA would understand Ho to teach that a client device in Ho “provides the server with ‘the current location of the mobile communication device’” in connection with contacting the server for an interactive information element(s) (Petition at 22) fails for the same reason. Ho contains no such disclosure or teaching. *See Ex. 2006*, ¶62. Rather, Ho makes clear that, when a client device goes “online,” the server in Ho “automatically” determines and sends

interactive information elements to the client device—without any affirmative provision of information by the client device to the server. Ex. 1004 at 9:29–33, 10:14–25, Fig. 5; *see* Ex. 2006, ¶62.

The simple fact that Ho teaches that its interactive information elements may alternatively “be used for the propagation of public announcement services, such as warnings of hurricanes, tsunamis, earthquakes, mobilisation of armed forces and the like” does not demonstrate otherwise. Ex. 1004 at 9:7–15; *see* Petition at 22. Ho states this alternative functionality “facilitates the *instant transmittal* of emergency warning to players of video games.” Ex. 1004 at 9:13–15 (emphasis added). As such, Ho does not disclose or suggest having Ho’s client device provide Ho’s server with any information in connection with such “emergency warning[s],” contrary to Petitioner’s argument. Ex. 2006, ¶¶64–65. Moreover, pursuant to the full language of claim 1, the “hot spot information to download” includes “hidden content for presenting to the user when the hot spot is activated.” ’662 Patent at 14:53–57. An emergency warning that is instantly transmitted (Ex. 1004 at 9:7–15) can hardly be characterized as “hidden content” that is only presented to a user upon activation of a hot spot by the user, as required by the claims of the ’662 Patent. Ex. 2006, ¶64.

Tellingly, Petitioner’s argument that this disclosure in Ho nonetheless somehow teaches “that the mobile phone provides the server with ‘the current location of the mobile communication device’” is supported only by the declaration

of Dr. Zagal. Petition at 22 (citing Ex. 1003, ¶113). But, once again, Dr. Zagal’s testimony simply repeats Petitioner’s argument verbatim without any other support or analysis—and is thus entitled no weight. Ex. 1003, ¶113 (“In my opinion, a POSITA would understand this disclosure to teach that the client device provides the server with ‘the current location of the mobile communication device.’”); *see, e.g., MarkForged*, IPR2022-01431, Paper 7, at 14; *Xerox*, IPR2022-00624, Paper 9, at 15; *see also TQ Delta*, 942 F.3d at 1361 (rejecting obvious challenge “based on conclusory and unsupported expert testimony”).

Petitioner’s alternative suggestion that a POSITA would understand Ho to teach that a client device in Ho “provides the server with ‘the current location of the mobile communication device’” based on Ho’s example of an “advertisement for a fast food chain” likewise fails. Petition at 22; *see also* Ex. 2006, ¶63. There is no disclosure or suggestion in Ho that “an advertisement of a chain of fast food restaurants” generated after a player “slay[s] the hamburger monster” in Ho (Ex. 1004 at 5:35–38, 8:19–21) should be targeted or otherwise limited based on the “the current location” of the player. *See generally* Ex. 1004; *see also* Ex. 2006, ¶63. Quite the opposite, the advertisements taught by Ho are with respect to ubiquitous brands, such as “airliner[s]” and “chain[s] of fast food restaurants” (Ex. 1004 at 5:27–38, 8:11–21), suggesting that Ho envisions its advertisements need not be based on “the current location” of the player. Ex. 2006, ¶63.

Moreover, Petitioner fails to identify any disclosure in Ho that supports its argument that the client device in Ho provides the server with “the current location of the mobile communication device” “so that the fast food chain that is advertised is one which is within the geographic location of the client device.” Petition at 22. Rather, and once again, the only support Petitioner cites in support of this argument is the testimony of Dr. Zagal, which again simply repeats Petitioner’s speculative argument verbatim without any other support or analysis—and is thus entitled to no weight. Ex. 1003, ¶114; *see, e.g., MarkForged*, IPR2022-01431, Paper 7, at 14; *Xerox*, IPR2022-00624, Paper 9, at 15; *see also TQ Delta*, 942 F.3d at 1361.

Third, Petitioner’s argument that a POSITA would understand Ho to teach that a client device in Ho provides the server with a “scene” or “element” “for which hot spot information is desired” based on Ho’s disclosed example of a “hamburger monster” interactive information element fails for the same reasons. Petition at 22; *see also* Ex. 2006, ¶¶66–68. Once again, the only support Petitioner cites for this contention is the testimony of Dr. Zagal, which again simply repeats Petitioner’s argument verbatim without any other support or analysis—and is thus entitled to no weight. Ex. 1003, ¶114; *see, e.g., MarkForged*, IPR2022-01431, Paper 7, at 14; *Xerox*, IPR2022-00624, Paper 9, at 15; *see also TQ Delta*, 942 F.3d at 1361.

Additionally, Petitioner’s contrived argument regarding Ho’s “hamburger monster” ignores the full context of both Ho and claim 1 of the ’662 Patent. *See* Ex.

2006, ¶¶67–68. Claim 1 requires that a mobile communication device “contact[] a server for hot spot information to download, comprising providing the server with ... a scene for which hot spot information is desired, [or] an element for which hot spot information is desired,” and subsequent “downloading hot spot information from the server.” ’662 Patent, at 14:39–54. Petitioner contends that Ho’s “interactive information element”—*e.g.*, “hamburger monster”—is the claimed “hot spot information.” Petition at 21, 25; *see also* Ex. 2006, ¶67. Thus, under Petitioner’s theory, provision of “the hamburger monster”—*i.e.*, the “hot spot information” itself—to the server by the client device so that the server may return *only* a corresponding “advertisement” necessarily fails to teach providing the server with “a scene” or “an element” for which hot spot information is desired, and subsequent downloading of “hot spot information”—*i.e.*, “the hamburger monster”—from the server. ’662 Patent, at 14:39–54; *see also* Ex. 2006, ¶¶67–68.

Fourth, Ho does not teach or render obvious “contacting a server for hot spot information to download, comprising providing the server with ... a version identifier for hot spot information currently on the mobile communication device,” contrary to Petitioner’s argument. Ex. 2006, ¶69; *see* Petition at 23. Ho, at most, teaches only that, when a client device connects to the server (*i.e.*, goes “online”), the server “automatically” checks some *unspecified* “information on the client end device relating to the interactive information elements” and “then determines

whether the interactive information element(s)” “needs to be changed/renewed.” Ex. 1004 at 9:29–33, 10:2–25, Fig. 5; *see also* Ex. 2006, ¶70. There is no disclosure or suggestion in Ho, however, of a “version identifier” associated with any interactive information element(s), let alone the provision of such a “version identifier” to Ho’s server by a client device in Ho. Ex. 2006, ¶70.

Petitioner argues that a POSITA would nonetheless have understood Ho to “teach and render obvious providing the server with ‘a version identifier’ for the interactive information element so that the mobile phone can keep track of whether the version on the mobile phone is the latest version.” Petition at 23. But, this is nothing more than “the impermissible *ex post* reasoning and hindsight bias that *KSR* warned against.” *TQ Delta*, 942 F.3d at 1361; *see also* Ex. 2006, ¶71. Petitioner “may not resort to speculation, unfounded assumptions or hindsight reconstruction to supply deficiencies in its factual basis.” *Warner*, 379 F.2d at 1017. And the Board likewise “cannot accept” Petitioner’s unsupported speculation “as a replacement for documentary evidence for core factual findings.” *K/S Himpp*, 751 F.3d at 1366.

The impropriety of Petitioner’s hindsight argument is further demonstrated by the fact that the primary support cited by Petitioner for this agreement is Dr. Zagal’s testimony, which, once again, simply repeats Petitioner’s speculative argument with little other support or analysis—and is thus entitled little to no weight. Ex. 1003,

¶116; *see, e.g., MarkForged*, IPR2022-01431, Paper 7, at 14; *Xerox*, IPR2022-00624, Paper 9, at 15; *see also TQ Delta*, 942 F.3d at 1361.

At most, Petitioner and Dr. Zagal cite only Ex. 1020 (“Hannay”) in passing support of their speculation. Petition at 23; Ex. 1003, ¶116. Hannay teaches that, as “new levels and/or versions” of its video game are created, some “games content” therein may have “an associated identifier tag that identifies the version that has been used in its construction.” Ex. 1020, [0019]; *see* Ex. 2006, ¶72. But critically, Petitioner fails to rely on Hannay in this or any Ground in the Petition. And Petitioner and Dr. Zagal also fail to explain why a POSITA would have been motivated to apply Hannay’s “identifier tag[s]” with respect to a game version to Ho’s interactive information elements—let alone demonstrate “a reasonable likelihood of success” in such modification of Ho. *See Forest Lab’ys, LLC v. Sigmapharm Lab’ys, LLC*, 918 F.3d 928, 934 (Fed. Cir. 2019). And, as is well-established, “[a]n invention is not obvious simply because all of the claimed limitations were known in the prior art at the time of the invention.” *Id.*; *see In re Warner*, 379 F.2d at 1017.

2. Ho, in View of Aoki, Does Not Render Obvious Claim 1(a)

Petitioner’s alternative argument that “the combined teachings of Ho and Aoki render th[is] limitation obvious” (Petition at 24) fares no better. Petitioner contends that Aoki discloses a game terminal that sends “the ID of the player who uses the game terminal” and a “game ID identifying a game” to an “advertisement

management sever” “in order to obtain advertisements.” Petition at 24 (citing Ex. 1005, [0077]). Petitioner, however, mischaracterizes Aoki. *See* Ex. 2006, ¶¶73–75.

Aoki is directed to a “game advertisement charge system.” *E.g.*, Ex. 1005, [0002]. While other publications “disclose ... distribution or displaying techniques for game advertisements,” Aoki’s teachings are focused on “methods for setting advertisement charges.” Ex. 1005, [0005]. Indeed, Aoki contains a generic disclosure by which a “game advertisement” is simply sent to and output at a “game terminal.” Ex. 1005, [0067]. In contrast, the single paragraph of Aoki cited by Petitioner relates to an “advertisement charge process.” Ex. 1005, [0077]; *see* Petition at 24. In particular, Aoki teaches that—after display of an advertisement in a game—information regarding that advertisement, including its “advertisement ID,” “advertisement point,” and “ID of the player who uses the game terminal,” is uploaded to an “advertisement management server” for “use[] in an advertisement charge process applied in the advertisement management server.” Ex. 1005, [0077].

That “advertisement charge process” is illustrated in Figure 12 of Aoki. Ex. 1005, [0088], Fig. 12. Aoki describes that the advertisement management server calculates a “charge point” based on the information received by the server. Ex. 1005, [0088]. At a part of that calculation, the advertisement management server determines whether the “user information” received by the server (*e.g.*, “age, sex, profession”) falls within the “user range” for which the advertisement was intended.

Ex. 1005, [0089]. Thus, and contrary to Petitioner’s suggestion, Aoki does not teach propagation of an advertisement in game based on “the ID of the player who uses the game terminal.” Ex. 2006, ¶75. Rather, at most, Aoki teaches only *post-display* analysis of information regarding a user that viewed an advertisement (at the back end) in the context of setting the charge for that advertisement to its publisher. *Id.*

Petitioner’s suggestion that, “in the combined Ho-Aoki system,” Ho’s “client end device would continue to download from the server interactive information elements and hidden context, and would do so after providing the server the ID of the player [] and a game ID []” is thus incorrect. Petition at 24; *see* Ex. 2006, ¶76. Rather, in any such combined Ho-Aoki system, Ho’s client device would, at most, only provide the server with the “ID of the player” *after* the downloading of an interactive information element and display of the content associated therewith—for calculation of a “charge point” for the content in accordance with Aoki’s advertisement charge process. *See* Ex. 2006, ¶76.

Proceeding from its faulty premise, Petitioner argues that a POSITA would have been motivated to modify Ho in view of Aoki because such modification “would allow the server to provide Ho’s mobile device with advertisements that a targeted to specific users and games.” Petition at 24. But, in addition to being based on a fundamental misinterpretation of Aoki, this is nothing more than impermissible *ex post* reasoning by Petitioner. *See KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 421

(2007) (“A factfinder should be aware, of course, of the distortion caused by hindsight bias and must be cautious of arguments reliant upon *ex post* reasoning.”).

As discussed, there is nothing in Ho that suggests the client device in Ho provides any specific information to Ho’s server in connection with contacting the server for “hot spot information” to download—let alone a “user ID” or “game ID.” Ex. 2006, ¶77. Rather, when a client device in Ho connects to Ho’s server (*i.e.*, goes “online”), the server “***automatically***” “determines whether the interactive information element(s)” is “legitimate” and/or “needs to be changed/renewed.” Ex. 1004 at 9:29–33, 10:2–25 (emphasis added), Fig. 5; *see also* Ex. 2006, ¶77.

The impropriety of Petitioner’s hindsight argument is further illustrated by the fact that Dr. Zagal simply repeats Petitioner’s argument verbatim. Ex. 1003, ¶117. Dr. Zagal’s testimony is thus entitled little to no weight. *E.g.*, *MarkForged*, IPR2022-01431, Paper 7, at 14; *Xerox*, IPR2022-00624, Paper 9, at 15. And, as noted, the Federal Circuit has consistently “rejected obviousness determinations based on conclusory and unsupported expert testimony”—like Petitioner’s challenge here—noting that “crediting such testimony risks allowing the challenger to use the challenged patent as a roadmap to reconstruct the claimed invention using disparate elements from the prior art—i.e., the impermissible *ex post* reasoning and hindsight bias that *KSR* warned against.” *TQ Delta*, 942 F.3d at 1361.

At most, Petitioner and Dr. Zagal cite only Ex. 1008 (“Sturman”) in passing support of their speculation. Petition at 24; Ex. 1003, ¶117. Sturman teaches that “[p]layer-specific information” may be used in some advertising delivery schemes. Ex. 1008, [0054]; *see* Ex. 2006, ¶78. But critically, Petitioner fails to rely on Sturman in this or any Ground in the Petition. And Petitioner and Dr. Zagal also fail to explain why a POSITA would have been motivated to apply Sturman’s specific advertising delivery schemes to Ho’s interactive information elements—let alone demonstrate “a reasonable likelihood of success” in such modification of Ho. *See Forest Lab’ys*, 918 F.3d at 934. And, as is well-established, “[a]n invention is not obvious simply because all of the claimed limitations were known in the prior art at the time of the invention.” *Id.*; *see In re Warner*, 379 F.2d at 1017 (noting a petitioner must supply the factual basis for the challenge and “may not resort to speculation, unfounded assumptions or hindsight reconstruction to supply deficiencies in its factual basis”).

For all these reasons, Petitioner has failed to demonstrate that a POSITA would have been motivated to modify Ho, in view of Aoki, to render obvious “contacting a server for hot spot information to download, comprising providing the server with at least one of” of the items of information required by claim 1.

ii. Ho, in View of Aoki, Does Not Render Obvious Dependent Claims 2–12

Because Ho, in view of Aoki, does not render independent claim 1 obvious, Ho, in view of Aoki, does not render obvious any of dependent claims 2–12.

Additionally, dependent claim 7 is not obvious for independent reasons. And Petitioner concedes that Ho, in view of Aoki, does not render obvious dependent claim 12—as it is not even challenged in Ground 1.

1. *Ho, in View of Aoki, Does Not Render Obvious Claim 7*

Claim 7 recites the method of claim 1 “further comprising saving on the mobile communication device a version identifier for the downloaded hot spot information.” Petitioner contends that Ho alone “discloses and renders obvious th[is] additional limitation of claim 7.” Petition at 33. In particular, Petitioner contends Ho renders this limitation obvious for the same reasons Ho allegedly renders obvious “contacting a server for hot spot information to download, comprising providing the server with at least one of: ... a version identifier for hot spot information currently on the mobile communication device.” Petition at 33.

But, for the reasons discussed above with respect to claim 1(a), there is no disclosure or suggestion in Ho of a “version identifier” associated with any of Ho’s interactive information element(s). Moreover, Petitioner’s single-sentence argument with respect to claim 7 fails to demonstrate that any (undisclosed) “version identifier” for Ho’s interactive information element(s) is “sav[ed] on the mobile communication device,” as required by claim 7. *See* Petition at 33. Ho thus does not disclose or render obvious the additional limitation of claim 7.

iii. Claim 13(a): Ho, in View of Aoki, Does Not Disclose or Suggest “Contacting a Server for Hot Spot Information to

**Download, Comprising Providing the Server With User-
Identification Information”**

For the same reasons as discussed above with respect to claim 1(a), Petitioner has failed to carry its burden of demonstrating that Ho, in view of Aoki, discloses or renders obvious “contacting a server for hot spot information to download, comprising providing the server with user-identification information,” as required by claim 13. *See* Petition at 35–36 (Petitioner contending limitation 13[a] is rendered obvious by Ho in view of Aoki “for the same reasons” discussed for limitation 1[a]). Indeed, and critically, the Petition is *devoid* of any contention that Ho alone discloses or renders obvious “contacting a server for hot spot information to download, comprising providing the server with *user-identification information*,” as required by claim 13. *See* Petition at 21–24, 35–36. Rather, at most, Petitioner argues only “the combined teachings of Ho and Aoki render th[is] limitation obvious.” Petition at 24. But for the reasons discussed above with respect to claim 1(a), Petitioner has failed to demonstrate a POSITA would have been motivated to modify Ho in view of Aoki to render this limitation obvious.

**iv. Ho, in View of Aoki, Does Not Render Obvious Dependent
Claims 14–20**

Because Ho, in view of Aoki, does not render independent claim 13 obvious, Ho, in view of Aoki, does not render obvious any of dependent claims 14–20.

Indeed, Petitioner concedes that Ho, in view of Aoki, does not render obvious dependent claim 20—as it is not even challenged in Ground 1.

b. Ground 3: Ho, in View of Kim, Does Not Render the Challenged Claims Obvious

1) Claim 1(a): Ho, in View of Kim, Does Not Disclose or Suggest “Contacting a Server for Hot Spot Information to Download, Comprising Providing the Server With At Least One of ...”

For all the reasons discussed above with respect to Ground 1 (Ho in view of Aoki), Ho fails to disclose or render obvious “contacting a server for hot spot information to download, comprising providing the server with at least one of” the items of information required by claim 1. At a minimum, Petitioner has failed to carry its burden of demonstrating that Ho alone “discloses and renders obvious limitation 1(a).” *See* Petition at 61. And Petitioner does not contend that Kim cures any of the deficiencies in Ho with respect to this limitation. *See* Petition at 61.

i. Ho, in View of Kim, Does Not Render Obvious Dependent Claims 2–12

Because Ho, in view of Kim, does not render independent claim 1 obvious, Ho, in view of Kim, does not render obvious any of dependent claims 2–12. Additionally, dependent claim 7 is not obvious for independent reasons. And Petitioner concedes that Ho, in view of Kim, does not render obvious dependent claim 12—as it is not even challenged in Ground 3.

1. *Ho, in View of Kim, Does Not Render Obvious Claim 7*

Petitioner contends that Ho alone “discloses and renders obvious the additional limitation of claim 7.” Petition at 64. For all these reasons discussed above with respect to Ground 1 (Ho in view of Aoki), Ho fails to disclose or render obvious “saving on the mobile communication device a version identifier for the downloaded hot spot information,” as required by claim 7.

ii. Claim 13(a): Ho, in View of Kim, Does Not Disclose or Suggest “Contacting a Server for Hot Spot Information to Download, Comprising Providing the Server With User-Identification Information”

Petitioner has failed to carry its burden of demonstrating that Ho, in view of Kim, discloses or renders obvious “contacting a server for hot spot information to download, comprising providing the server with user-identification information,” as required by claim 13. *See* Petition at 65–66 (Petitioner contending limitation 13[a] is rendered obvious by Ho in view of Kim “for the same reasons” discussed for limitations 1[a]). Indeed, and critically, the Petition is *devoid* of any contention that Ho alone discloses or renders obvious “contacting a server for hot spot information to download, comprising providing the server with *user-identification information*,” as required by claim 13. *See* Petition at 65–66; *see also* Petition at 21–24. And Petitioner does not contend that Kim cures this deficiency. *See* Petition at 65–66. Petitioner thus has presented no argument that this limitation of claim 13 is disclosed or rendered obvious by Ho in view of Kim.

iii. Ho, in View of Kim, Does Not Render Obvious Dependent Claims 14–20

Because Ho, in view of Kim, does not render independent claim 13 obvious, Ho, in view of Kim, does not render obvious any of dependent claims 14–20. Indeed, Petitioner concedes that Ho, in view of Kim, does not render obvious dependent claim 20—as it is not even challenged in Ground 3.

c. Ho is Not “Printed Publication” Prior Art Within the Meaning of 35 U.S.C. § 311(b)

A patent can be challenged in an IPR “only on the basis of prior art consisting of *patents* or *printed publications*,” 35 U.S.C. § 311(b) (emphasis added)—which limits available prior art, as a matter of law, to only references that are themselves “a prior art patent or prior art printed publication.” *Qualcomm Inc. v. Apple Inc.*, 24 F.4th 1367, 1375 (Fed. Cir. 2022). Each of Petitioner’s Grounds 1 and 3 thus fails, as each relies on Ho, which is not a prior art “patent” or “printed publication” as of the ’662 Patent’s priority date of June 26, 2007 (*see supra* Section III).

Ho was filed on July 12, 2006, but did not publish until January 17, 2008. Ex. 1004 at 1. And Ho never issued as a patent. Accordingly, Ho is only a “printed publication” under § 311(b) as of the date it became available to the public—*i.e.*, Ho’s publication date—which notably is after the June 26, 2007, priority date of the ’662 Patent. Indeed, the Federal Circuit has repeatedly held that “[t]he statutory phrase “printed publication” . . . mean[s] that *before the critical date* [of the

challenged patent] the reference must have been *sufficiently accessible to the public* interested in the art.” *In re Cronyn*, 890 F.2d 1158, 1160 (Fed. Cir. 1989) (emphasis added); *accord Acceleration Bay, LLC v. Activision Blizzard Inc.*, 908 F.3d 765, 772–74 (Fed. Cir. 2018) (affirming finding in IPR that reference was not “printed publication” because it “was not publicly accessible before the critical date”).

Thus, 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.” *Samsung Elecs. Co. v. Infobridge Pte. Ltd.*, 929 F.3d 1363, 1368, 1370 (Fed. Cir. 2019). Indeed, ““public accessibility” is “the touchstone in determining whether a reference constitutes a ‘printed publication.’” *Acceleration Bay*, 908 F.3d at 772 (additional quotation marks omitted). And an IPR “petitioner ... ha[s] the burden to prove [a reference] is a printed publication.” *Id.*

Petitioner failed to carry its burden here. For example, Petitioner fails to contend that Ho was publicly accessible prior to the ’662 Patent’s priority date of June 26, 2007. Nor can it. Ho was not published until January 17, 2008. Ex. 1004 at 1. Ho was thus not “accessible to the public” until after the ’662 Patent’s priority date and thus cannot be “printed publication” prior art within the meaning of § 311(b). *See Samsung*, 929 F.3d at 1368.

Petitioner’s suggestion that Ho is “prior art under [] pre-AIA § 102(e)” does not demonstrate otherwise. Petition at 11. Petitioner expressly relies on the *filing*

date of Ho as the effective prior art date. *See id.* Petitioner, however, 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” (*OddzOn Prods., Inc. v. Just Toys, Inc.*, 122 F.3d 1396, 1402 (Fed. Cir. 1997)) to be available prior art in an IPR. Indeed, applications filed with the Patent and Trademark Office “shall be kept in confidence by the [] Office” prior to publication in accordance with controlling protocols. 35 U.S.C. § 122(a)–(b). Relatedly, courts have long recognized that a “mere application for a patent” is neither a “printed publication” nor a “patent.” *Brown v. Guild*, 90 U.S. 181, 224 (1874); *see In re Wertheim*, 646 F.2d 527, 532 (C.C.P.A. 1981) (application “was not ... a patent or a printed publication”). And when Congress limited IPRs to “only prior art consisting of *patents* or *printed publications*,” 35 U.S.C. § 311(b) (emphasis added), it necessarily excluded other categories of prior art from the permissible bases for an IPR. Pre-publication “application[s] for patent” under pre-AIA § 102(e) (*i.e.*, “secret prior art”) are among those excluded—in contrast to the “printed publication[s]” under pre-AIA § 102(a) and (b). *See* 35 U.S.C. § 311(b).

For all these reasons, Ho is not “prior art consisting of patents or printed publications” under § 311(b) and is therefore ineligible to be prior art in an IPR.⁴ Accordingly, Grounds 1 and 3 fail because they rely on the ineligible Ho reference.

VI. GROUND 2 & 4: NONE OF THE JIAU GROUNDS RENDERS THE CHALLENGED CLAIMS OBVIOUS

A. Ground 2: Jiau, in View of Aoki, Does Not Render the Challenged Claims Obvious

1) Claim 1(b): Jiau, in View of Aoki, Does Not Disclose or Suggest “Downloading Hot Spot Information From the Server ...”

Claim 1 recites, *inter alia*, “downloading hot spot information from the server to the mobile communication device, the hot spot information comprising: 1) hidden content for presenting to the user when the hot spot is activated; and 2) coordinate information.” *See* Petition at 44 (claim 1(b)). Jiau, in view of Aoki, fails to disclose or render obvious “**downloading**” such “hot spot information.”

Petitioner contends that Jiau alone “discloses and renders obvious” this limitation because Jiau discloses a client system that can “load” “lots and objects” that “comprise hotspot and hotspace information” from a “server system 108.”

⁴ In *Samsung Electronics Co., Ltd. v. Lynk Labs, Inc.*, IPR2022-00149, Paper 33, at 10–12 (P.T.A.B. June 26, 2023)—a non-precedential decision—another panel held to the contrary. That decision is incorrect for all the reasons set forth above and should not control in any event in view of recent Supreme Court precedent. *See Loper Bright Enters. v. Raimondo*, No. 22-451, 603 U.S. ____ (June 28, 2024) (overruling *Chevron* and holding that the APA requires no deference to agency’s statutory interpretation).

Petition at 44 (emphasis added). But, real-time fetching of data by a client system from a server system is not **downloading** that data onto the client system. Ex. 2006, ¶91; *see Finisar Corp. v DirecTV Group, Inc.*, 523 F. 3d 1323, 1331–32 (Fed. Cir. 2008) (construing the phrase “downloading into a memory storage device” to mean “transferring the desired data into a device capable of saving it for later access”); *MOAEC, Inc. v. Pandora Media, Inc.*, No. 07-CV-654-BBC, 2008 WL 4500704, at *6–8 (W.D. Wis. Sept. 30, 2008) (interpreting “download” to refer only to data that “reside[s] or become[s] resident on a storage device ... for later access”).

This is especially true in Jiau. The described invention of Jiau “allows users to explore and interact in a multi-owner, three-dimensional virtual world.” Ex. 1006 at 1:31–32. Jiau’s “virtual word” is “divided into a plurality of ‘lots,’ similar to ‘lots’ of real estate in the real world.” *Id.* at 2:1–2. Each “lot” in the “virtual word” is stored in the “memory or database” of a remote “server.” *Id.* at 2:7–9; *see id.* at 6:22–24 (stating “lots of various users are stored” in “a server data processing system”). “[U]sers access the virtual world via client data processing systems using a networking model such as the World Wide Web, and a network such as the internet or an intranet.” *Id.* at 2:4–6.

Jiau’s system “allows the user to move seamlessly from lot to lot in the virtual world by implementing multithreaded loader software in the client data processing system that fetches and displays both lots and objects in the lots from the server in

such a way that the user feels as if he is moving through an endless landscape.” Ex. 1006 at 3:15–18. In particular, the client data processing system in Jiau “*fetches and discards*” lots ... depending, in part, on the motions of the user as the user ‘moves’ through the virtual three- dimensional world.” *Id.* at 3:18–21 (emphasis added).

Jiau describes that, initially, a “user starts at a predetermined current location of a predetermined current lot in the virtual world.” Ex. 1006 at 9:31–32. Therewith, the client system in Jiau “will request from the server and load all eight lots surrounding this current lot.” *Id.* at 10:1–2. As such lots are requested from the server, “they are cached by the client system.” *Id.* at 10:3–5. Whenever a user moves, however, “the client system updates his current location” (*id.* at 10:32–11:1) and accordingly “fetches” any “new lots”—and “*discards*” lots that are no longer needed—“to re-render and display the current three-dimensional view.” *Id.* at 3:18–21 (emphasis added), 10:32–11:4.

Petitioner characterizes the virtual lots in Jiau as “downloaded lots” that “comprise[] hotspot and hotspace information.” Petition at 44. Critically, however, Jiau itself never refers to its virtual lots as such. *See generally* Ex. 1006; *see also* Ex. 2006, ¶89. In fact, the word “download” is never mentioned in Jiau. *See id.* Quite the opposite, a POSITA would understand that Jiau’s virtual lots are stored on the server system in Jiau for only occasional fetching by a client system (as opposed to downloading for later use by the client system). Ex. 2006, ¶89; *see, e.g.*, Ex. 1006 at

2:7–9 (stating each “lot” in the “virtual word” is stored in the “memory or database” of a remote “server”); 6:22–24 (stating “lots of various users are stored” in the “server data processing system”); *see also* *MOAEC*, 2008 WL 4500704, at *6–8 (interpreting “download” to refer only to data that “reside[s] or become[s] resident on a storage device ... for later access”).

Indeed, Jiau makes clear that users can only access Jiau’s “virtual world”—*i.e.*, the virtual lots stored on the remote server system—via a client system when “using a networking model such as the World Wide Web, and a network such as the internet or an intranet.” Ex. 1006 at 2:4–6; *see also* Ex. 2006, ¶90. Put another way, users cannot access Jiau’s virtual world on a client system disconnected from the server system—because there are no virtual lots downloaded on the client system. Ex. 2006, ¶90. Rather, only when a client system is connected to Jiau’s server system, some limited virtual lots may, at most, simply be “cached by the client system.” Ex. 1006 at 10:1–5. But, as noted above, as a user moves in Jiau’s virtual world, those cached lots are automatically “*discard[ed]*” from the client system. *Id.* at 3:18–21 (emphasis added); *see* Ex. 2006, ¶91. Such “fleeting or transient retention” of those virtual lots in a client system of Jiau “does not qualify as ... downloading.” *Finisar*, 523 F. 3d at 1332; *see MOAEC*, 2008 WL 4500704, at *6–8 (interpreting “download” to refer only to data that “reside[s] or become[s] resident on a storage device ... for later access”); *see also* Ex. 2006, ¶91.

For all these reasons, Jiau fails to disclose or render obvious “downloading” the “hot spot information,” as required by claim 1. At a minimum, Petitioner has failed to carry its burden of demonstrating that Jiau alone “discloses and renders obvious limitation 1(b).” *See* Petition at 44. And while Petitioner contends that this “limitation was obvious in view of Aoki” (Petition at 46), Petitioner’s arguments with respect to Aoki are focused on the claimed “coordinate information”—as opposed to the required “downloading” of the full “hot spot information” from the server. *See* Petition at 44–47. Thus, Petitioner has likewise failed to carry its burden of demonstrating that Jiau, in view of Aoki, discloses or renders obvious “downloading” the claimed “hot spot information,” as required by claim 1.

i. Jiau, in View of Aoki, Does Not Render Obvious Dependent Claims 2–12

Because Jiau, in view of Aoki, does not render independent claim 1 obvious, Jiau, in view of Aoki, does not render obvious any of dependent claims 2–12. Additionally, each of dependent claim 7 and dependent claim 12 is not obvious for independent reasons, as discussed further below.

1. Jiau, in View of Aoki, Does Not Render Obvious Claim 7

Claim 7 recites the method of claim 1 “further comprising saving on the mobile communication device a version identifier for the downloaded hot spot information.” Petitioner contends that Jiau alone “discloses and renders obvious th[is] additional limitation of claim 7.” Petition at 53. Petitioner contends that an

“object id” of Jiau associated with an “object [that] may have a hotspot or hotspace” *may* constitute a “version identifier” *if* that “object is changed or modified.” Petition at 53. But, in fact, the “object id” of Jiau is not a “version identifier for [] downloaded hot spot information” that is saved on a mobile communication device, as required in claim 7. A POSITA would understand that the claimed “version identifier” is a unique number or other designation for distinguishing one “hot spot information” from another “hot spot information.” Ex. 2006, ¶93. The “object id” of Jiau identified by Petitioner, in contrast, is not a “version identifier”—let alone with respect to downloaded “hot spot information.” *See* Ex. 2006, ¶¶95–99.

As noted, Jiau’s virtual world consists of virtual “lots.” Ex. 1006 at 2:1–2. Jiau’s virtual “lots” can include “objects,” which themselves can include “hotspots.” *Id.* at 2:12–21, 16:29–17:6; *see, e.g., id.* at 15:9–17, 15:18–24. “Figs. 13(a) and 13(b) show exemplary attributes and properties of lots and objects, respectively.” *Id.* at 8:9–10. Figure 13(a)—regarding a lot—shows, *inter alia*, a “lot name 1302” and a “unique lot id 1304” as well as a list 1306 of objects in the lot. *Id.* at 17:14–20; Fig. 13(a). Figure 13(b)—regarding an object—shows, *inter alia*, an object “name 1352” and “type of object 1356” as well as a “list of hotspots and hotspaces 1358.” *Id.* at 17:25–32; Fig. 13(b). Notably, Petitioner contends that Jiau’s “hotspots” and “hotspaces”—not Jiau’s “objects”—satisfy the “hot spot” and “hot spot information” limitations in the Challenged Claims. *See, e.g.,* Petition at 40, 42, 44.

Jiau does not disclose any type of unique object id nor any type of unique hotspot id (or hotspot id). *See* Ex. 1006 at 17:25–32; Fig. 13(b); *see also* Ex. 2006, ¶97. Rather, at most, Jiau discloses only an object “name” 1352—which Jiau makes clear “need not be unique.” Ex. 1006 at 17:25–32; Fig. 13(b). And while other portions of Jiau haphazardly refer to an “object id” as opposed to object name 1352, none of those few portions suggest that an “object id” is something materially different than object name 1352—let alone some type of unique *version* identifier for an “object.” *See, e.g.,* Ex. 1006 at 17:7–9; 19:31–32; *see also* Ex. 2006, ¶97.

Petitioner’s argument that “[a] POSITA would have understood that an object id may be updated when an object is changed or modified, such that the object id would constitute a version identifier” (Petition at 54) fails for this and other reasons. Indeed, there is no disclosure or suggestion in Jiau any “object id” (or “object name”) associated is “updated” as a result of any change or modification of that object. *See generally* Ex. 1006; *see also* Ex. 2006, ¶97. Quite the opposite, Jiau discloses that any “object id” or “object name” is with respect to a “predetermined” list of objects in a “World Database” for a virtual world. Ex. 1006 at Fig. 1a; *see also* Ex. 2006, ¶97. This “predetermined” nature of Jiau’s objects suggests that Jiau does not contemplate versioning of the objects. Ex. 2006, ¶97.

Moreover, and tellingly, the only support Petitioner cites for this argument is the expert testimony of Dr. Zagal. Petition at 54 (citing Ex. 1003, ¶197). But Dr.

Zagal’s testimony on this point simply repeats Petitioner’s argument verbatim and without any support itself. Ex. 1003, ¶197 (“In my opinion, a POSITA would have readily understood that an object id may be updated when an object is changed or modified, such that the object id would constitute a version identifier.”).

A declaration—like Dr. Zagal’s here—that repeats the Petition verbatim “is conclusory and unsupported, adds little to the conclusory assertion for which it is offered to support, and is entitled to little weight.” *Xerox*, IPR2022-00624, Paper 9, at 15. Simply put, an expert declaration—like Dr. Zagal’s here—that “merely parrots the Petition” is entitled to “little to no weight.” *MarkForged*, IPR2022-01431, Paper 7, at 14; *see Content Square*, IPR2022-00316, Paper 13, at 38.

As previously noted, the Federal Circuit has also consistently “rejected obviousness determinations based on conclusory and unsupported expert testimony”—like Petitioner’s challenge here—noting that “crediting such testimony risks allowing the challenger to use the challenged patent as a roadmap to reconstruct the claimed invention using disparate elements from the prior art—i.e., the impermissible *ex post* reasoning and hindsight bias that KSR warned against.” *TQ Delta*, 942 F.3d at 1361. A petitioner must, instead, supply the factual basis for the challenge and “may not resort to speculation, unfounded assumptions or hindsight reconstruction to supply deficiencies in its factual basis.” *Warner*, 379 F.2d at 1017.

Petitioner failed to do so here, however. And the Board “cannot accept” Petitioner’s and Dr. Zagal’s unsupported general conclusions “as a replacement for documentary evidence for core factual findings in a determination of patentability.” *K/S Himpp*, 751 F.3d at 1366; *see also Xerox*, IPR2022-00624, Paper 9, at 15 (“Dr. Jones does not cite to any additional supporting evidence or provide any technical reasoning to support his statement. Thus, the cited declaration testimony is conclusory and unsupported, adds little to the conclusory assertion for which it is offered to support, and is entitled to little weight.”).

Thus, Petitioner’s conclusory, unsupported contention that a POSITA would have understood the “object id” of Jiau to be a unique “version identifier for [] downloaded hot spot information” that is saved on a mobile communication device—despite Jiau’s overall disclosures otherwise—necessarily fails to carry Petitioner’s burden of demonstrating that Jiau discloses or renders obvious the additional limitation of claim 7. *See Ex. 2006*, ¶¶93–97.

The same is true with respect to Petitioner’s alternative argument that Jiau’s passing reference to “short nVersion” in Figure 17 somehow discloses or renders obvious the additional limitation of claim 7. Petition at 54. As Jiau makes clear, Figure 17 specifies file information for a “lot.” *Ex. 1006* at 19:28–29; *see also Ex. 2006*, ¶¶98. And the reference to “short nVersion” in Figure 17 is with respect to the structure for the for the “File Header” (“FOREVER21HEAD”)—not the structure

for any object (e.g., “Object1”/“FOREVER21OBJ”), let alone hotspot therein. Ex. 2006, ¶198; *see* Ex. 1006 at Fig. 17. Dr. Zagal’s conclusory, unsupported testimony on this point—which merely repeats Petitioner’s argument verbatim and is thus entitled to no weight—does not demonstrate otherwise. Ex. 1003, ¶197; e.g., *MarkForged*, IPR2022-01431, Paper 7, at 14; *Xerox*, IPR2022-00624, Paper 9, at 15; *see also TQ Delta*, 942 F.3d at 1361 (rejecting obvious challenge “based on conclusory and unsupported expert testimony”).

2. *Jiau, in View of Aoki, Does Not Render Obvious Claim 12*

Claim 12 recites the method of claim 1 wherein the “hidden content” downloaded to the mobile communication device as part of the claimed “hot spot information” comprises “a second hot spot.” Petitioner contends Jiau alone “discloses and renders obvious th[is] additional limitation of claim 12” because Jiau teaches that an “object” may be associated with “a plurality of hot spots,” which may be “activated separately” with “different hotspot activities associated therewith.” Petition at 56 (citing Ex. 1006 at Claims 8–10). Petitioner’s argument, however, fails to demonstrate that Jiau teaches that the content presented to a user when a first hot spot is activated comprises a “second hot spot,” as claimed in claim 12.

Jiau discloses only in a general sense that an “object” in a virtual “lot” can have one or more “hotspots.” Ex. 1006 at 16:29–31; *see id.* at 17:25–30 (stating that data structure for storing properties of an “object” includes a “list of hot spots”). For

example, a “hotspot” may be “the entirety of the object,” such that the object only has a single hotspot. Ex. 1006 at 3:29–30; Ex. 2006, ¶102. Alternatively, a hotspot may take up only a portion of an object, such that the object may include multiple hotspots. *See* Ex. 1006 at 17:25–30 (stating that data structure for storing properties of an “object” includes a “list of hot spots”); Ex. 2006, ¶102. For example, Figure 11(d) of Jiau (reproduced below) illustrates “object 1184” (“a sign”) that includes “hotspot link 1186” in the lower left corner of the object:

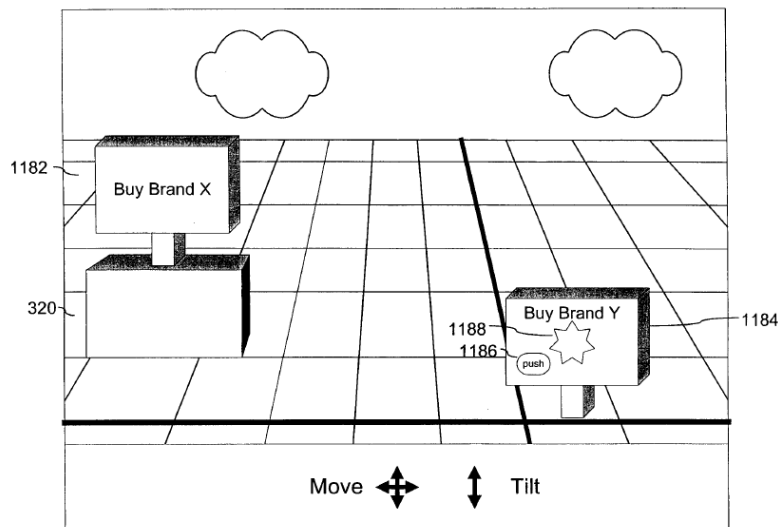


Fig. 11(d)

Ex. 1006 at 15:9–17, Fig. 11(d). Jiau’s “object 1184” (“a sign”) thus has available area for one or more additional hotspots. *See* Ex. 2006, ¶102.

Accordingly, a POSITA would understand Jiau’s general disclosure that an “object” may be associated with “a plurality of hot spots” (Ex. 1006 at Claim 8) to mean that an object may be sized in a virtual lot such that it may contain—and thereby present to the user *in the first instance*—two or more hotspots (*e.g.*, multiple

“push” buttons 1186 in Figure 11(d)). Ex. 2006, ¶103. Jiau, however, never discloses a hotspot with another, second hot spot within it that is accessed only by activating the first hot spot, as claim 12 requires. Ex. 2006, ¶103.

Dr. Zagal’s conclusory testimony that Jiau “discloses and renders obvious the additional limitation of claim 12” because “Jiau teaches that an object may be associated with ‘a plurality of hot spots’” does not demonstrate otherwise, as it merely repeats Petitioner’s argument verbatim without any other support or analysis—and is thus entitled no weight. Ex. 1003, ¶206; *e.g.*, *MarkForged*, IPR2022-01431, Paper 7, at 14; *Xerox*, IPR2022-00624, Paper 9, at 15; *see also TQ Delta*, 942 F.3d at 1361 (rejecting obvious challenge “based on conclusory and unsupported expert testimony”).

Petitioner’s argument that Jiau’s Figures 11(e) and 11(f) somehow disclose or render obvious the additional limitation of claim 12 (Petition at 56) likewise fails, as it is entirely speculative. Figure 11(e) of Jiau (reproduced below) “shows an example of an object 1192 having a[] hotspot link 1194 (e.g., a door-shape) allowing a user to enter an interior of the object.” Ex 1006 at 15:19–20, Fig. 11(e). “When a user activates hotspot 1194 of Fig. 11(e),” the “interior of object 1192” is displayed to the user, as shown in Figure 11(f) of Jiau (reproduced below). *Id.* at 15:21–23; Fig. 11(f); *see* Petition at 56.

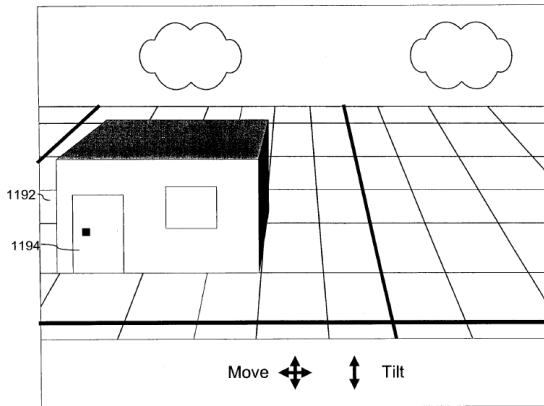


Fig. 11(e)

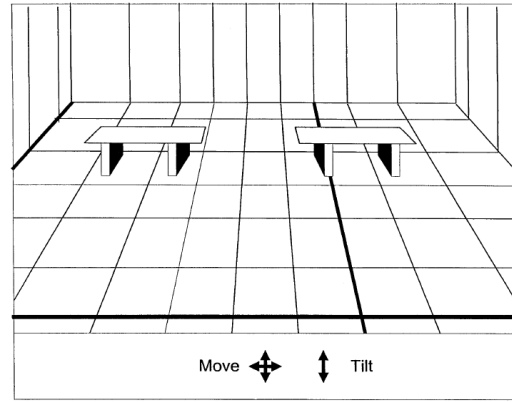


Fig. 11(f)

Ex. 1006 at Figs. 11(e), 11(f).

Critically here, Figure 11(f) of Jiau is *devoid* of any hotspots. *See id.* at Fig. 11(f), 5:18–24; *see also* Ex. 2006, ¶106. Petitioner’s contention that the “furniture” in the “building interior” shown in Figure 11(f) of Jiau may nonetheless “comprise additional hotspots” associated therewith “that are activated when a user ‘collides with or passes sufficiently close’ to them” (Petition at 56) is thus nothing but pure speculation by Petitioner—provided only in hindsight in the specific context of the Petition. *See KSR*, 550 U.S. at 421 (“A factfinder should be aware, of course, of the distortion caused by hindsight bias and must be cautious of arguments reliant upon *ex post* reasoning.”). As noted above, a petitioner “may not resort to [such] speculation, unfounded assumptions or hindsight reconstruction to supply deficiencies in its factual basis.” *In re Warner*, 379 F.2d at 1017. But that is exactly what Petitioner seeks to (impermissibly) do here.

Indeed, the only support Petitioner cites for this contention is the testimony of Dr. Zagal. Petition at 56 (citing Ex. 1003, ¶206). But, once again, Dr. Zagal’s testimony simply repeats Petitioner’s speculative argument verbatim without any other support or analysis—and is thus entitled to no weight. Ex. 1003, ¶206 (“The hidden content, for instance, the furniture in the building interior (yellow) may comprise additional hot spots which are similarly activated when a user ‘collides with or passes sufficiently close’ to them[.]”); *see, e.g., MarkForged*, IPR2022-01431, Paper 7, at 14; *Xerox*, IPR2022-00624, Paper 9, at 15; *see also TQ Delta*, 942 F.3d at 1361 (rejecting obvious challenge “based on conclusory and unsupported expert testimony”).

Thus, Petitioner’s conclusory and unsupported speculation that the furniture shown in Figure 11(f) of Jiau comprises a hotspot—despite Jiau’s suggestion to the contrary given the absence of any identified hotspot in the Figure—fails to carry Petitioner’s burden of demonstrating that Jiau discloses or renders obvious the additional limitation of claim 12. *See* Ex. 2006, ¶¶100–106.

ii. Claim 13(a): Jiau, in View of Aoki, Does Not Disclose or Suggest “Contacting a Server for Hot Spot Information to Download, Comprising Providing the Server With User-Identification Information”

Claim 13 recites, *inter alia*, “contacting a server for hot spot information to download, comprising providing the server with *user-identification information*.” ’662 Patent, at 15:30–32 (emphasis added). Jiau fails to disclose or render obvious

providing a server with “user-identification information” in connection with downloading “hot spot information” from the server.

As discussed above, the invention of Jiau “allows users to explore and interact in a multi-owner, three-dimensional virtual world” consisting of different “lots.” Ex. 1006 at 1:31–2:2. Petitioner contends that “objects” contained in the “lots” fetched by the client system in Jiau may contain “hotspots,” which Petitioner contends satisfy the claimed “hot spot information.” Petition at 40, 42. But, as Petitioner acknowledges, in Jiau, such “objects” and “hotspots” are fetched from the server as part of the “lot.” *See* Petition at 43; *see, e.g.*, Ex. 1006 at 3:18–21 (“The client data processing system fetches and discards lots (including objects in the lots) ... as the user ‘moves’ through the virtual three- dimensional world.”); *see also* Ex. 2006, ¶109. And, as discussed above, lots (and objects therein) are fetched in Jiau based on the submission of “lot id(s)” (or “object id(s)”) by the client system to the server system. Ex. 1006 at Fig. 8, 13:8–18, 16:3–17, 17:7–13; *see* Ex. 2006, ¶109.

There is no disclosure in Jiau that lots and the objects therein—let alone any corresponding hotspots—are fetched in response to any “user-identification information” submitted to Jiau’s server system by a client system in Jiau. Ex. 2006, ¶109. Rather, as discussed, lots and objects therein are fetched based on a user’s movements in the virtual world via transmission of “lot id(s)” (or “object id(s)”) by the client system to the server system. Ex. 2006, ¶109; *e.g.*, Ex. 1006 at 3:13–21,

9:30–10:30, 10:32–11:6; 13:8–18, Fig. 8. And moreover, Jiau expressly notes that “[a]ll users, even those who do not have their own lots, can browse the lots of the virtual world, visiting in turn the lots that others have designed.” Ex. 1006 at 2:22–23; *see* Ex. 2006, ¶109.

The fact that Jiau discloses that a “user id” (*i.e.*, the id of the user that “own[s]” the lot/object) may be associated with a “lot” and an “object”—in a data structure “stored in server system 108”—is irrelevant. Ex. 1006 at 17:14–20, 17:25–18:4; *see* Petition at 43. As discussed, there is no disclosure or suggestion in Jiau that a client system provides server system 108 with any such “user id” (*i.e.*, the id of the user that “own[s]” the lot/object) to fetch new lots or objects therein as a user moves about Jiau’s virtual world. *See* Ex. 2006, ¶110. Rather, Jiau teaches that a “lot id” or “object id” is provided by the client system. Ex. 2006, ¶110; *e.g.*, Ex. 1006 at Fig. 8.

Petitioner’s argument that “a POSITA would have [] understood that the client system provides ‘user-identification information’ (*i.e.*, a user id) in order to access and download the lots and objects comprising hot spot information” (Petition at 43) thus has no foundation in Jiau. *See Warner*, 379 F.2d at 1017 (noting a petitioner must supply the factual basis for the challenge and “may not resort to speculation, unfounded assumptions or hindsight reconstruction to supply deficiencies in its factual basis”); *see also K/S Himpp*, 751 F.3d at 1366 (“[T]he Board cannot accept

general conclusions ... as a replacement for documentary evidence for core factual findings in a determination of patentability.”)

Indeed, the only evidence Petitioner cites in support of this argument is Dr. Zagal’s testimony. *Id.* (citing Ex. 1003, ¶170). But Dr. Zagal’s testimony on this point simply repeats Petitioner’s argument verbatim without any other support or analysis—and is thus entitled to no weight. Ex. 1003, ¶170 (“Thus, a POSITA would have also understood that the client system provides ‘user-identification information’ (*i.e.*, a user id) in order to access and download the lots and objects comprising hot spot information.”); *see, e.g., MarkForged*, IPR2022-01431, Paper 7, at 14; *Xerox*, IPR2022-00624, Paper 9, at 15; *see also TQ Delta*, 942 F.3d at 1361 (rejecting obvious challenge “based on conclusory and unsupported expert testimony”).

Petitioner’s alternative argument that “the combined teachings of Jiau and Aoki render obvious th[is] limitation obvious” (Petition at 43–44) fares no better. Petitioner contends that Aoki discloses a game terminal that sends “the ID of the player who uses the game terminal” to an “advertisement management sever” “in order to obtain advertisements.” Petition at 43 (citing Ex. 1005, [0077]). Petitioner, however, again mischaracterizes Aoki. *See* Ex. 2006, ¶¶111-113.

As discussed above with respect to Ground 1 (Ho in view of Aoki), Aoki does not teach propagation of an advertisement in game based on “the ID of the player

who uses the game terminal,” contrary to Petitioner’s suggestion. Ex. 2006, ¶¶112–113. Rather, at most, Aoki teaches only *post-display* analysis of information regarding a user that viewed an advertisement (at the back end) in the context of setting the charge for that advertisement to its publisher (*i.e.*, an “advertisement charge process”). *Id.*; *see* Ex. 1005, [0077], [0088], [0089], Fig. 12.

Petitioner’s suggestion that, “in the combined Jiau-Aoki system,” Jiau’s “client end device would continue to download hotspot [] information, and would do so after providing the server the ID of the player” is thus incorrect. Petition at 43; *see* Ex. 2006, ¶114. Rather, in any such combined Jiau-Aoki system, Jiau’s client device would, at most, only provide the server with the “ID of the player” *after* the downloading of a hotspot and display of the content associated therewith—for calculation of a “charge point” for the content in accordance with Aoki’s advertisement charge process. *See* Ex. 2006, ¶114.

Proceeding from its faulty premise, Petitioner argues that a POSITA would have been motivated to modify Jiau in view of Aoki because such modification would “allow[] [Jiau’s] server to provide advertisements that are targeted to specific users.” Petition at 44. But, in addition to being based on a fundamental misinterpretation of Aoki, this is nothing more than Petitioner’s impermissible hindsight speculation, evidenced by, *inter alia*, the fact that Dr. Zagal merely repeats Petitioner’s speculative argument verbatim. Ex. 1003, ¶171; *see, e.g., MarkForged*,

IPR2022-01431, Paper 7, at 14; *Xerox*, IPR2022-00624, Paper 9, at 15; *see also KSR*, 550 U.S. at 421 (“A factfinder should be aware, of course, of the distortion caused by hindsight bias and must be cautious of arguments reliant upon *ex post* reasoning.”); *TQ Delta*, 942 F.3d at 1361.

At most, Petitioner and Dr. Zagal cite only Ex. 1008 (“Sturman”) in passing support of their speculation. Petition at 44; Ex. 1003, ¶171. Sturman suggests that “[p]layer-specific information” may be used in some advertising delivery schemes. Ex. 1008, [0054]; *see* Ex. 2006, ¶115. But critically, Petitioner fails to rely on Sturman in this or any Ground in the Petition. And Petitioner and Dr. Zagal also fail to explain why a POSITA would have been motivated to apply Sturman’s specific advertising delivery schemes to Jiau’s virtual world—let alone demonstrate “a reasonable likelihood of success” in such modification of Jiau. *See Forest Lab’s*, 918 F.3d at 934. And, as is well-established, “[a]n invention is not obvious simply because all of the claimed limitations were known in the prior art at the time of the invention.” *Id.*; *see In re Warner*, 379 F.2d at 1017 (noting a petitioner must supply the factual basis for the challenge and “may not resort to speculation, unfounded assumptions or hindsight reconstruction to supply deficiencies in its factual basis”).

In fact, there is nothing in Jiau that would motivate a POSITA to modify Jiau so as to condition the hotspots being loaded in Jiau’s virtual world on the specific identification of the user. Ex. 2006, ¶115. Quite the opposite, Jiau strives to ensure

that “[a]ll users, even those who do not have their own lots, can browse the lots of the virtual world”—and thereby enjoy the same virtual world (including the lots, objects, and hotspots therein) in the same manner. Ex. 1006 at 2:22–23; *see* Ex. 2006, ¶115. Indeed, Jiau discloses that each virtual lot—including the objects therein and their associated hotspots—are stored on a remote server for common access by all “client systems” of Jiau. *E.g.*, Ex. 1006 at 6:22–7:2; *see* Ex. 2006, ¶115.

Petitioner’s proposed modification of Jiau—such that different users are presented with different “targeted” advertising content as a result of activation of the same “hotspot” in Jiau—is thus contrary to intended purpose of Jiau. *See* Ex. 2006, ¶116; *see also In re Gordon*, 733 F.2d 900, 902 (Fed. Cir. 1984) (rejecting proposed modification that would render primary reference “inoperable for its intended purpose”); *In re Ratti*, 270 F.2d 810, 813 (C.C.P.A. 1959) (rejecting “suggested combination of references” that “would require a substantial reconstruction and redesign of the elements shown in [primary reference] as well as a change in the basic principles under which the [primary reference] was designed to operate”).

For all these reasons, a POSITA would not have been motivated to modify Jiau, in view of Aoki, to render obvious providing a server with “user-identification information” in connection with downloading “hot spot information” from the server, as required by claim 13.

iii. Claim 13(b): Jiau, in View of Aoki, Does Not Disclose or Suggest “Downloading Hot Spot Information From the Server ...”

For the same reasons as discussed above with respect to claim 1(b), Petitioner has failed to carry its burden of demonstrating that Jiau, in view of Aoki, discloses or renders obvious “downloading” the claimed “hot spot information,” as required by claim 13. *See* Petition at 57 (Petitioner contending limitations 13[b][1] and 13[b][2] are rendered obvious by Jiau in view of Aoki “for the same reasons” discussed for limitations 1[b][1] and 1[b][2]).

iv. Jiau, in View of Aoki, Does Not Render Obvious Dependent Claims 14–20

Because Jiau, in view of Aoki, does not render independent claim 13 obvious, Jiau, in view of Aoki, does not render obvious any of dependent claims 14–20. Additionally, dependent claim 20—which requires that the “hidden content” downloaded from the server as part of the “hot spot information” comprise “a second hot spot”—is not obvious for the reasons discussed above with respect to claim 12. *See* Petition at 57 (Petitioner contending claim 20 is rendered obvious by Jiau in view of Aoki “for the same reasons” discussed for claim 12).

b. Ground 4: Jiau, in View of Kim, Does Not Render the Challenged Claims Obvious

1) Claim 1(b): Jiau, in View of Kim, Does Not Disclose or Suggest “Downloading Hot Spot Information From the Server ...”

For all these reasons discussed above with respect to Ground 2 (Jiau in view of Aoki), Jiau fails to disclose or render obvious “*downloading*” the claimed “hot spot information,” as required by claim 1. At a minimum, Petitioner has failed to carry its burden of demonstrating that Jiau alone “discloses and renders obvious limitation 1(b).” *See* Petition at 68. And while Petitioner contends that this “limitation was obvious in view of Kim” (Petition at 68), Petitioner’s arguments with respect to Kim are focused on the claimed “coordinate information”—as opposed to the required “downloading” of the full “hot spot information” from the server. *See* Petition at 68–69. Thus, Petitioner has likewise failed to carry its burden of demonstrating that Jiau, in view of Kim, discloses or renders obvious “downloading” the claimed “hot spot information,” as required by claim 1.

i. Jiau, in View of Kim, Does Not Render Obvious Dependent Claims 2–12

Because Jiau, in view of Kim, does not render independent claim 1 obvious, Jiau, in view of Kim, does not render obvious any of dependent claims 2–12. Additionally, each of dependent claim 7 and dependent claim 12 is not obvious for independent reasons, as discussed further below.

1. *Jiau, in View of Kim, Does Not Render Obvious Claim 7*

Petitioner contends that Jiau alone “discloses and renders obvious the additional limitation of claim 7.” Petition at 70. For all these reasons discussed above with respect to Ground 2 (Jiau in view of Aoki), Jiau fails to disclose or render obvious “saving on the mobile communication device a version identifier for the downloaded hot spot information,” as required by claim 7.

2. *Jiau, in View of Kim, Does Not Render Obvious Claim 12*

Petitioner contends that Jiau alone “discloses and renders obvious the additional limitation of claim 12.” Petition at 71. For all these reasons discussed above with respect to Ground 2 (Jiau in view of Aoki), Jiau fails to disclose or render obvious the method of claim 1, wherein the “hidden content” downloaded to the mobile communication device as part of the claimed “hot spot information” comprises “a second hot spot,” as required by claim 12.

ii. Claim 13(a): Jiau, in View of Kim, Does Not Disclose or Suggest “Contacting a Server for Hot Spot Information to Download, Comprising Providing the Server With User-Identification Information”

Claim 13 recites, *inter alia*, “contacting a server for hot spot information to download, comprising providing the server with *user-identification information*.” ’662 Patent, at 15:30–32 (emphasis added). Petitioner contends that Jiau alone discloses and renders obvious this limitation of claim 13. Petition at 71 (Petitioner contending limitations 13[a] is rendered obvious by Jiau in view of Kim “for the

same reasons” discussed for limitation 13[a]); *see* Petition at 68 (Petitioner contending Jiau alone “discloses and renders obvious limitation 1(a)”). For all these reasons discussed above with respect to Ground 2 (Jiau in view of Aoki), Jiau fails to disclose or render obvious “contacting a server for hot spot information to download, comprising providing the server with user-identification information,” as required by claim 13.

iii. Claim 13(b): Jiau, in View of Kim, Does Not Disclose or Suggest “Downloading Hot Spot Information From the Server ...”

For the same reasons as discussed above with respect to claim 1(b), Petitioner has failed to carry its burden of demonstrating that Jiau, in view of Kim, discloses or renders obvious “downloading” the claimed “hot spot information,” as required by claim 13. *See* Petition at 71 (Petitioner contending limitations 13[b][1] and 13[b][2] are rendered obvious by Jiau in view of Kim “for the same reasons” discussed for limitations 1[b][1] and 1[b][2]).

iv. Jiau, in View of Kim, Does Not Render Obvious Dependent Claims 14–20

Because Jiau, in view of Kim, does not render independent claim 13 obvious, Jiau, in view of Kim, does not render obvious any of dependent claims 14–20. Additionally, dependent claim 20—which requires that the “hidden content” downloaded from the server as part of the “hot spot information” comprise “a second hot spot”—is not obvious for the reasons discussed above with respect to claim 12.

See Petition at 71–72 (Petitioner contending claim 20 is rendered obvious by Jiau in view of Kim “for the same reasons” discussed for claim 12).

VII. CONCLUSION

For at least the reasons set forth above, the Petition fails to shoulder its burden of establishing that the Challenged Claims of the ’662 Patent are unpatentable.

Dated: August 2, 2024

Respectfully submitted,

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CERTIFICATE OF WORD COUNT

Pursuant to 37 C.F.R. § 42.24(d), the undersigned certifies that this Patent Owner Response contains 13,870 words according to the word-processing program used to prepare this paper. The foregoing word count complies with the 14,000 word type-volume limit specified by 37 C.F.R. § 42.24(b)(2).

Dated: August 2, 2024

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CERTIFICATE OF SERVICE

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