

IPR2024-00132

U.S. 9,731,202

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. IPR2024-00132

Patent No. 9,731,202

PATENT OWNER'S RESPONSE

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EXHIBIT LIST

Exhibit	Description
2001	Playrix's Exchange of Proposed Terms and Claim Elements for Construction, served January 30, 2024
2002	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.
2003	Declaration of Henry H. Houh, Ph.D., in Support of Playrix's Proposed Claim Constructions
2004	Declaration of Dr. Robert Akl, D.SC.
2005	CV of Dr. Robert Akl, D.SC.
2006	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 the Petition and Institution Decision. The Board instituted review of claims 1-9 (the “Challenged Claims”) of U.S. Patent No. 9,731,202 (the “’202 Patent”). But Petitioner PLR Worldwide Sales Limited (“Petitioner” or “Playrix”) has not met its burden of proving unpatentability of any of these claims.

None of the prior art teaches the fundamental feature claimed by the ’202 Patent: updating video-game content without updating the entire mobile video game. The ’202 Patent allows for these updates based on claimed steps of checking what updated video-game content to send based on specific criteria. Updates of this nature changed the face of mobile gaming as it existed on the June 2007 priority date by allowing game developers to create new features or levels to implement in games, which drive user engagement and avoid problems with fully downloading and updating the game.

This significant feature was absent in mobile video games in June 2007. Petitioner relies on two primary references describing advertisement servers (“ad servers”). But the references fail to disclose multiple elements of independent claim 1, as described below.

While this issue need not be reached as a result, the references that the Petition cites for certain of the dependent claims likewise fail to disclose the subject matter

of those claims and would not have been combined as of the 2007 priority date. For instance, none of the references discloses or renders obvious “an in-game placement location associated with the updated video-game content” required by claim 4, “the step of tracking what has been uploaded to the mobile communication device” recited in claim 5, or the required display of “the video-game content within the game at a location based on user interaction” under claim 6.

As explained further below, 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. 2004), 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 ’202 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. 2004, ¶27. Alternatively, a POSITA may have additional education that might substitute for some of the experience, and additional substantial 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; Ex. 2004, ¶29. Thus, Petitioner does not require experience in programming video games, but only “working with computer gaming systems or software application development.” This difference does not materially affect the analysis presented below, however.

III. BACKGROUND

A. Mobile Gaming Technology Was Entirely Different as of the June 26, 2007, Priority Date of the '202 Patent.

As of the priority date of the '202 Patent, June 26, 2007, as Dr. Akl explains, the claimed invention was both novel and non-obvious. Ex. 2004, ¶¶32-37, 38. The Petition ignores the broader context and history of mobile gaming in 2007, and instead adopts a hindsight-driven viewpoint to suggest that technology that was novel in 2007 was somehow well-known and basic simply because it is used widely today. Ex. 2004, ¶¶39-40.

The '202 Patent describes and claims a novel and unconventional way of using mobile games and mobile devices, involving “updating in-game content on a mobile communication device” based on specified criteria, which “may prolong user

interest in a game for a mobile communication device.” ’202 Patent, 2:7-11; *see also* Ex. 2004, ¶33. The innovative mobile gaming technology claimed in the ’202 Patent originates from mobile game developer Mobile Deluxe (“MDX”), which was founded in 2003 and is the precursor of FPG. Ex. 2006, ¶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. *Id.* ¶9.

It was not until mid-2008, a full year after the filing of the application that led to the ’202 Patent, that modern App Stores became available.¹ Ex. 2004, ¶39. Before that time, mobile games had a very short life cycle. Ex. 2004, ¶¶40-41. Wireless carriers each managed their own individual app store or “deck,” with a limited catalog of games (typically several hundred titles). Ex. 2004, ¶40. Once that capacity was reached, the carrier would be forced to remove or “sunset” older game titles to make room for new games. Ex. 2004, ¶41.

As the ’202 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

¹ *See, e.g.*, <https://www.apple.com/newsroom/2018/07/app-store-turns-10/> (“Apple introduced the App Store on July 10, 2008....”); <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.”).

in favor of others.” *Id.* col. 1:28-32; *see also* Ex. 2004, ¶35. Because of this short life cycle, carriers, developers, and publishers did not update a game during its lifetime, and there was no expectation a game would evolve. Ex. 2004, ¶40. Rather, mobile games were a one-time purchase, typically \$4.99 to \$9.99 each. Ex. 2004, ¶44. 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. 2004, ¶¶ 40, 44. The specification 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.” *Id.* at 1:29-32; *see also* Ex. 2004, ¶35. Thus, at the time the ’202 Patent was 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. *See* Ex. 2004, ¶41.

The ’202 Patent’s claims provide a unique solution to the problem of updating video-game content by disclosing a method that uses specific factors associated with a mobile device to do so, for instance such that “the updated content may comprise a new level within the game” or “the user has something new to look at or explore.” *Id.*, 4:31-45; *see also* Ex. 2004, ¶36. 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. 2004, ¶45.

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 '202 Patent's Claims.

The Petition suggests that “[g]ame developers embraced the idea of updateable games even before mobile games became popular.” Petition at 7; *see also* Ex. 2004, ¶171. To support this position, Petitioner relies on unauthenticated documents that are not prior art, and which, in fact, demonstrate the non-obviousness of the claimed invention of the '202 Patent in June 2007. Indeed, each of these references (and the prior art references) relate to the “provision and display of advertisements in a video game,” as Petitioner admits, on PC and console devices. Petition at 8. The references, in fact, explain how the concept of updating video-game content that is “usable when the video game operates on the communications device,” was not an operation performed by the ad servers described in these articles. Ex. 2004, ¶¶169-176.

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 7. 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 '202 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 spring² of 2007” (Ex. 1015 at 1 (emphasis added)) confirming that as of the June 2007 priority date, the invention provided by the ’202 Patent was novel. Ex. 2004, ¶175.

The Petition also relies on Exhibit 1016, a thesis entitled Advertising in Computer Games. See, e.g., Petition at 7. While this thesis is stamped with the date September 28, 2006, Petitioner tellingly does not submit any evidence corroborating it is a publication at all, let alone demonstrating that the thesis actually published on this date, or otherwise authenticating the Exhibit. Nor does Petitioner rely on Exhibit 1016 as a prior art reference. Further, 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. 2004, ¶¶173, 175. And indeed, as discussed in further detail below, such in game advertising is not updated video-game content “used” in the videogame. Ex. 2004, ¶46.

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

² Spring in Australia occurs from September to November, after the June 2007 priority date. <https://www.australia.com/en-us/facts-and-planning/when-to-go/australias-seasons.html>

at 7. 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, nor could it, as the press release is barely over one-page and provides no technical details at all. Ex. 2004, ¶174. Further as with the other exhibits, Exhibit 1017 states “[i]n the *near future*, mobile in-game advertising *will become* increasingly attractive for providers of mobile phones.” Ex. 1017 at 1 (emphasis added); *see* Ex. 2004, ¶174. Thus, this press release does not describe prior art, but merely describes what may happen in the *future*. Ex. 2004, ¶¶174-175.

Finally, the Petition relies on Exhibit 1018, purportedly published in 2001. *See, e.g.*, Petition at 7; *see also* Ex. 2004, ¶172. Petitioner likewise submits no evidence corroborating the date of alleged publication or authenticating this Exhibit. Exhibit 1018 similarly confirms that video-game content updates were not available at the time of the claimed invention of the ’202 Patent. Ex. 2004, ¶¶170, 172. Indeed, Exhibit 1018 expressly 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); *see* Ex. 2004, ¶175. Further, this article confirms exactly the need to address the problem that the ’202 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* Ex. 2004, ¶170.

IV. GROUNDS 1-4: NONE OF THE HAYS GROUNDS RENDERS THE CHALLENGED CLAIMS OBVIOUS.

As explained further below, Hays fails to disclose numerous claim limitations.

A. Ground 1: Hays Does Not Render the Challenged Claims Obvious.

1. Claim 1[b]: Hays does not disclose “checking what updated video-game content to send based on one of the [claimed] factors....”

Petitioner contends Hays’s advertising matching and weighting system meets the “checking” step of claim 1[b]. Petition at 17. However, Hays does not disclose “checking” using *any* of the factors required by claim 1[b], which are “a type of the mobile communication device, a telecom service associated with the mobile communication device, and a service provider of the telecom service.” Ex. 2004, ¶¶51-60.

Rather, Hays explains that “[t]he advertising matching and weighting system 220 may calculate the weight of each advertisement based on several factors” Ex. 1005, [0043]. The Hays factors include “campaign goal and completion data from the advertisement serving database 122 and information regarding the specific client type from the advertisement recipient database 120.” *Id.*; Ex. 2004, ¶52. Thus, Hays is clear that weights are assigned, or advertisements are matched, based on factors associated with the advertisements. Ex. 2004, ¶53. Indeed, Hays selects advertisements (the alleged updated video-game content) from a weighted set,

“where the probability of an advertisement being selected is directly derived from the advertisement’s assigned weight, relative to other advertisements in the set.” Ex. 1005, [0043]; Ex. 2004, ¶52.

A POSITA would understand that the weighting and matching system of Hays selects what advertisement to send based on factors related to the advertisement, *i.e.*, “the advertisement’s assigned weight.” Ex. 2004, ¶53; Ex. 1005, [0043]. Further, this assigned weight is “relative to other advertisements in the set,” and thus the weighting is between individual advertisements. *Id.*, [0043]. In contrast, the “checking” step of 1[b] requires use of the explicitly recited factors related to the mobile communication device. These factors are related to the mobile device receiving the data, not the data itself. In contrast, Hays weights the data (*i.e.*, the advertisements) against other advertisements for targeting purposes. Ex. 2004, ¶¶53-55. And Hays targets advertising based on “campaign goal and completion data” (Ex. 1005, [0043]) or “specific demographic characteristics of a game player,” (*id.*, [0044]), but neither of these discloses checking the specific factors required by claim 1[b]. Ex. 2004, ¶¶53-55.

A POSITA would also understand that Hays’s matching and weighting system is distinct from the claimed “checking” step because the “checking” step is a compatibility determination with the user’s mobile device. Ex. 2004, ¶54. The “checking” step determines what “updated video content to send” based on the

factors required by the claim. Ex. 2004, ¶¶56-58. A POSITA would have understood that, at the time of the invention, this would have required checking for compatibility of the updated video-game content with the mobile device and service provider, which operated on different platforms. Ex. 2004, ¶¶58-59. In contrast, Hays is simply comparing and weighting or ranking advertisements, not the recited factors. *Id.*

2. Petitioner’s Expert Testimony Should Be Afforded Little Weight

Petitioner relies on Dr. Zagal to attempt to cure this deficiency, but this too fails. Petition at 18 (citing Ex. 1003, ¶100). Dr. Zagal simply parrots the petition, nearly verbatim. *Compare* Petition at 17-20 (addressing element 1[b]) *with* Ex. 1003, ¶¶99-104. As such, Dr. Zagal’s testimony is due little weight. *Xerox Corp. v. Bytemark, Inc.*, IPR2022-00624, Paper 9, at 18 (PTAB Aug. 24, 2022) (precedential) (an expert declaration is entitled to little weight when it contains an exact restatement of the petition’s arguments without any additional supporting evidence or reasoning). And Dr. Zagal does not even offer an opinion on obviousness with respect to claim 1[b]. *See* Ex. 1003, ¶103 (“If Patent Owner argues that these teachings are from different embodiments and thus are not *anticipatory* of this limitation, Patent Owner would be incorrect.” (emphasis added)). Dr. Zagal’s testimony on anticipation is irrelevant to a ground of obviousness. *See Minkin v.*

Gibbons, P.C., 680 F.3d 1341, 1351 (Fed. Cir. 2012) (explaining “anticipation and obviousness are separate conditions of patentability, requiring different tests and different elements of proof”).

But more importantly, Dr. Zagal fundamentally misunderstands the state of the art at the time of the invention. Ex. 2004, ¶56. Dr. Zagal asserts that this claim is met because “[d]ifferent service providers have different ranges of IP address,” but that does not address the claim language. Ex. 2004, ¶56. Even so, Hays does not “check” whether to send an advertisement based on the service provider. Ex. 2004, ¶56. Rather, at most Hays describes “Internet service providers” as an example of “demographic information about a game player,” which Hays may use in its weighting system. Ex. 1005, [0044]. But, as explained, Hays simply ranks advertisements in comparison to other available advertisements, as Dr. Akl confirms. Ex. 2004, ¶56.

Dr. Zagal also misunderstands the state of the art in asserting that “it would have been obvious for a POSITA to combine Hays’s teachings of weighing advertisements based on the type of game console (*id.*, ¶43) and Hays’s teachings of the various mobile communication devices that constitute game consoles (*id.*, ¶51).” Ex. 1003, ¶104; Ex. 2004, ¶57. A POSITA would have known that gaming consoles operated differently than games on mobile devices, and Hays itself draws this distinction. *See*, Ex. 1005, [0023]; Ex. 2004, ¶57. And even the types of games

offered on mobile devices varied from one another – based on the service provider, the mobile device, or the type of game (browser vs. application). Ex. 2004, ¶57. A POSITA would not have been motivated to apply a method for weighing advertisements to be sent to a game console to mobile devices, given the technical limitations at the time, including bandwidth, storage, and processing limitations. Ex. 2004, ¶58.

None of the operations of Hays’s “advertisement matching and weighting system” is the same as the “checking” step of claim 1[b]. Ex. 2004, ¶58. Nor would a POSITA seek to substitute the weighting system of Hays, which relates to game consoles, into mobile communications devices, because such a substitution was not technically feasible. Ex. 2004, ¶58. Because of these technical differences, a POSITA would not have had a reasonable expectation of success in combining these teachings of Hays. Ex. 2004, ¶58. Instead, a POSITA would have understood that different device types and/or service providers often have different requirements for video-game content and thus would have understood that updated video-game content would have to be sent in accordance with those requirements. Ex. 2004, ¶59.

3. Claim 1: Hays does not teach or suggest the use of “updated video-game content” in “a mobile video game” “that already exists on the mobile communication device” “when the video game operates on the communications device.”

Claim 1 requires “updated video-game content” that is used “in a mobile video game.” More specifically, claim 1 requires both “providing updated video-game content to a mobile communication device *for use* in a mobile video game” (claim 1[pre]), “the updated video-game content being *usable in the video game* that already exists on the mobile communication device” (claim 1[a]), and “the video-game content *being usable when the video game operates* on the communications device” (claim 1[c]).

Petitioner contends that Hays discloses updated video-game content, in the form of advertisements, that “is usable in the video game that already exists on the mobile communication device.” Petition at 16; *see* Ex. 2004, ¶61. That is not so. Ex. 2004, ¶¶61-74. At most, Hays discloses an advertisement delivery scheme that can be deployed in the context of a video game on a mobile device. Ex. 2004, ¶¶62-63. Hays does not disclose that its advertisements are “for use” in the mobile video game nor “usable in the video game.” ’202 Patent, claim 1. Instead, Hays is limited to displaying advertisements from external providers. Ex. 2004, ¶64. These advertisements are untethered from game functionality, and instead merely represent

“skins” that are displayed within the gaming environment but that do not affect game play. *See, e.g.*, Ex. 1005, [0017]-[0019]; Ex. 2004, ¶64.

Indeed, Hays explains that the ads can be presented as “commercial-like intermissions” or “as texture maps or other graphical displays (e.g., animations, video, etc.) on pre-designated geometry within the game.” *See, e.g.*, Hays, [0018] (“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.”). These advertisements are not “updated video-game content” and are not “for use” or “usable” in a mobile video game, as required by claim 1.

In particular, Hays never describes that any of its “ad units” alter the functionality of the game based on whether an advertisement is displayed, much less that the functionality is specific to an advertisement versus the preexisting placement location, i.e., the “ad unit.” Ex. 2004, ¶64. Rather, at most, Hays describes pre-designated ad units that may be “interactive within the game.” Ex. 1005, [0019], [0079]. But these ad units are not updated video-game content “for use” in the game because, to the extent there is any game functionality associated with an “ad unit,” that functionality is the same regardless of whether an advertisement is displayed on

the ad unit. Ex. 2004, ¶64. As Dr. Akl explains, the ad units are graphical “skins” that are displayed on items that are already present in the game. Ex. 2004, ¶64. The ad units display as their skin an advertisement to promote external products, not features or anything else “for use” in the mobile video game. Nor do the ad units relate to any in-game purchases. Ex. 2004, ¶¶64, 72. Indeed, Hays’s ad units are presented “across one or multiple game titles played across multiple platforms” and are “not limited to a single specific game title.” Ex. 1005, Abstract, [0017]; Ex. 2004, ¶64. Hays, thus, explains that the ad units are not intended for use in a mobile video game.

As one example “ad unit,” Hays describes an in-game can on which the skin of the brand Pepsi may be displayed. (Ex. 1005, [0058]). But Hays never describes altering the functionality of the game based on whether a Pepsi ad is displayed on this particular ad unit versus if the can were left blank or displayed a fictional brand. To the contrary, Hays makes clear that the ad unit, in this case the can, is nothing more than “pre-designated geometry within the game.” Hays, [0018]. Hays does not describe that inclusion of an advertisement on the ad unit enables additional functionality or modifies functionality that can be used or is usable in the video-game. Put another way, the game described in Hays operates in the same way whether the can is blank or says Pepsi, and similarly the user does not experience any differences in the game based on the Pepsi skin being applied to the can versus

there being no or a different advertisement there. Hays thus does not disclose updated content for use or usable in the video-game.

In this way, Hays's disclosure is similar to the prior art discussed during prosecution, to which the applicant successfully presented arguments to achieve allowability based upon the same claim language requiring that the updated content be for use and usable in the video-game. Ex. 2004, ¶¶66-68. To overcome a rejection based on U.S. Pub. No. 2004/0127279 to Gatto ("Gatto"), the applicant distinguished Gatto's description of items available for download via a hyperlink as not "usable" in the game. Ex. 1002 at 188 ("There is no indication that these promotional items are 'usable in the video game.' Indeed, it would not make sense for an email to provide hyperlinks for content that is usable in the email itself."); *id.* at 189 ("the Examiner fails to address the remaining claim language of this element-namely, whether this content is 'usable in the video game that already exists on the mobile communication device.' A close reading of Gatto reveals that the 'hyperlinks to download promotional items' are, in fact, not usable in the so-called video game."); *see also* Ex. 2004, ¶66. Elsewhere during prosecution, the applicant explained in detail that the "hyperlink" described in Gatto is not "updated 'promotional items' or content that would be 'usable in' the email ticket or a 'video game' itself, as opposed to a separate application program." *Id.* at 166. Later the applicant made clear that Gatto "does not teach or suggest any updated content that is 'useable in' a video

game.” *Id.* at 142. Rather, “[t]he available hyperlink ... causes the download of an entirely separate program or Internet page.” *Id.* Thus, the applicant expressly distinguished during prosecution the concept of a link to content used in a separate application, like a portal to data provided by an ad server, from the claimed “usable” content. Ex. 2004, ¶¶67-68.

Petitioner also contends that the ads are “usable in the game by being ‘pass[ed] on to the game code’ and ‘presented in the appropriate available ad units at the appropriate time during game play.’” Petition at 17 (quoting Ex. 1005, [0021]). First, Petitioner proposed no such construction of these claim terms in its Petition. Second, even if Petitioner had proposed this as a construction, its interpretation suggests that anything displayed or any data that is otherwise processed by the game code is “usable.” Such a definition of “usable” renders the claim language meaningless. Third, this embodiment in Hays merely teaches “present[ing]” or “pass[ing]” the advertisement to the game. Ex. 2004, ¶¶69-71. Just like the hyperlink displayed in Gatto, this is nothing more than displaying or transmitting the advertisement so that the user may view or access it, which does not disclose “the updated video-game content being *usable in the video game* that already exists on the mobile communication device,” as is required by claim 1. Ex. 2004, ¶¶70-71.

Even if the ad content were usable in the game, Hays does not contemplate introducing any new or *updated* video-game content. Ex. 2004, ¶¶72-73. Instead,

Hays describes a game that already has pre-designated content and advertisements in the game when it is obtained by a user. *See* Ex. 1005, [0019] (“When a game is shipped, it may have a fixed set of available ad units grouped into Zones (typically delineated by game levels or areas of play).”). Ex. 2004, ¶73. As with the “Pepsi” example above, the “energy bar” that was included in the game code (and that thus cannot be the updated content sent based upon the checking step) was interactive regardless of the skin displayed. *Id.* And this energy bar functions in the same way regardless of the skin displayed (i.e., regardless of whether the branding is known or fictional). *Id.* The energy bar is the usable video-game content, not any ad graphic applied to it in the form of a skin. Ex. 2004, ¶73. Thus, the updated content in the form of an ad graphic that Petitioner points to is not for use or usable in the video-game.

Thus, Hays does not teach or suggest using “updated video-game content” that is “for use” or “usable” in a “mobile video game” as required by claim 1. And, as with element 1[b] above, Dr. Zagal’s purported “testimony” with respect to these elements is little more than a word-for-word copy of the Petition and should thus be afforded no weight. *Compare* Petition at 14-16 (addressing element 1[pre]) *with* Ex. 1003, ¶¶92-95; *compare* Petition at 16-17 (addressing element 1[a]) *with* Ex. 1003, ¶¶96-98; *Xerox*, IPR2022-00624, Paper 9, at 18. In contrast, as cited above, Dr. Akl

offers detailed testimony outlining Hays's failure to disclose these claim elements.

See Ex. 2004, ¶74.

Because Hays does not render claim 1 obvious, claims 2-9 are also not rendered obvious. And, as addressed further below, claims 4-6 are not obvious for independent reasons.

4. Claim 4: Hays does not disclose “providing an in-game placement location associated with the updated video-game content.”

Claim 4 requires “sending information to the mobile communication device as part of the updated content” and that “the information provid[es] an in-game placement location associated with the updated video-game content.” Petitioner contends that this claim is met by Hays's disclosure of “ad units,” or spaces that include “pre-designated geometry within the game” that “are in-game placement locations associated with advertising.” Petition at 23. While Hays describes pre-designated locations for “ad units,” Hays, never discloses “*providing* an in-game placement location associated with the updated video-game content.” Ex. 2004, ¶¶75-80.

More specifically, the advertisements in Hays are placed in “specific ad units” or “*pre-designated* geometry within the game.” Ex. 1005, [0018] (“the advertisement delivery scheme and associated facility present 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”); *see also id.* at [0029]; [0040]. While Hays discloses transmitting ad units, it never discloses transmitting any information regarding the placement location of an ad unit. Ex. 2004, ¶¶77-78. Indeed, Hays explains that “advertisement opportunities may be offered to advertisers based on *standardized available ad units*, which may include, for example signs (e.g., a billboard, poster, or other form of static sign *regardless of its location*)....” Ex. 1005, [0073]. Hays is, thus, clear that the ad units are “standardized” and not related to any specific in-game placement location. *See, e.g., id.* at [0073]-[0074]; *see also* Ex. 2004, ¶¶77-78.

Petitioner relies on Dr. Zagal to attempt to cure this deficiency, but Dr. Zagal, again, only parrots the Petition and, thus, his testimony should be afforded little weight. *Compare* Petition at 24-25 (addressing claim 4) *with* Ex. 1003, ¶¶111-115; *see Xerox Corp.*, IPR2022-00624, Paper 9, at 18. In contrast, Dr. Akl explains how a POSITA would have understood the art at the time of invention and explains how a POSITA would not have found the claimed invention obvious. Ex. 2004, ¶¶79-80. As Dr. Akl provides, a POSITA would understand that Hays does not send location information with ad units that are available “regardless of [their] location.” Ex. 2004, ¶80; Ex. 1005, [0073]. Thus, Hays fails to teach or suggest claim 4.

5. Claim 5: Hays does not render obvious “tracking what has been uploaded to the mobile communication device.”

Claim 5 requires the “step of tracking what has been uploaded to *the mobile communications device*.” Petitioner contends that Hays discloses “tracking” and “recording” what advertisements have been sent. But this “tracking” is not related to what data “has been uploaded to the mobile communications device,” and instead, is only based on “sessions,” which would at most only represent a portion of any data uploaded to a mobile communications device. Ex. 1005, [0045]; Ex. 2004, ¶81. This fails for two reasons: first, “session” data would not represent all of the uploaded content that has was uploaded to a mobile communications a device in its entirety; and second, “session” data would not show what has been “uploaded” to the mobile communications device. Ex. 2004, ¶¶81-84.

Each of the three paragraphs of Hays Petitioner relies on makes clear that the tracking in Hays is related to a “session,” not the updated content that “has been uploaded to the mobile communications device,” as required by claim 5. Petition at 35-36 (citing Ex. 1005, [0038], [0045], [0025]); Ex. 2004, ¶¶81-83. Petitioner first relies on Paragraph [0038] in which Hays discloses “a record in the *active session database* 124, which registers the game player as the first member of the new session and is used to track and record all communications and data sent to and received from the advertisement recipient client 104,” which is only data recorded for an

“active session,” or a period a user is playing a game, not uploaded content. Ex. 1005, [0038]; Ex. 2004, ¶81. Paragraph [0045] is similarly limited to an “active session.” *Id.*, [0045]; Ex. 2004, ¶81.

Paragraph [0025] of Hays is similarly distinguishable. Petitioner alleges that Hays “discloses that ‘services that track and audit the quality of presentation of the in-game advertisements,’ including ‘advertisement impressions (which quantify the presentation qualities—e.g., viewing angle, percent screen size, time on screen, etc.—of an advertisement as presented in any given instance).” Petition at 26; Ex. 2004, ¶83. But this is related to the advertisement itself, not the “mobile communications device.” Ex. 2004, ¶83. Further, it never suggests “tracking what has been uploaded to the mobile communication device;” at most it describes information regarding the presentation of an advertisement, rather than when an advertisement has been uploaded. Ex. 2004, ¶¶82-83.

Further, a POSITA would understand Hays’s disclosure of sessions is consistent with Hays’s browser-based ad server. Ex. 2004, ¶82. Indeed, the system of the ’202 Patent needs to track what has been uploaded to the mobile device, whereas an ad system like Hays, tracks only what has been *seen* by the user. Ex. 2004, ¶82. Any unseen ad content does not matter in the context of an ad server. *Id.* But whether a mobile device has received updated video-game content is critical to the invention of the ’202 Patent because it dictates whether a new download is

required. Ex. 2004, ¶84. A POSITA would have appreciated this distinction as they would have sought to avoid re-downloading unnecessary levels every time the user launches the game. Ex. 2004, ¶¶84-85.

Hays thus fails to disclose “tracking what has been uploaded to the mobile communications device” as claim 5 requires.

6. Claim 6: Hays does not teach or suggest “displaying the video-game content within the game at a location based on user interaction.”

Claim 6 requires “displaying the video-game content within the game at a location based on user interaction.” Petitioner alleges that three separate disclosures in Hays provide an ad unit based on user interaction, but none of these states that the user interaction is used to determine location for display. Petition at 26-28; Ex. 2004, ¶¶86-95. Indeed, while Hays at most describes that the *time* at which ads are displayed is based on user interaction, the *location* at which they are displayed is independent of any user interaction. The claim relates to *where* content is displayed, not *when* – and Hays fails to disclose the former.

More specifically, Petitioner first alleges that Hays’s “mini games” disclose this limitation because the “mini games do not appear until a level is completed.” Petition at 27; Ex. 2004, ¶¶87-90. But this describes only that the ad unit may be displayed based on completion of a level. Ex. 1005, [0078]; Ex. 2004, ¶89. Hays’s “mini games” do not trigger any updated video-game content at a specific location

based on a user's interaction with "mini game," but rather only at a specific time—i.e., after completion of the mini-game Ex. 2004, ¶¶89-90.

Further, a POSITA would understand that these "mini games" are not related to a location of user interaction and also not "updated video-game content." Ex. 2004, ¶90. Instead, a POSITA would understand that the "mini games" appear based on completion of operations in the game, but the location at which they appear is pre-set and not "at a location based on user interaction," as the claim requires. Ex. 2004, ¶90. More importantly, Hays's "mini games" are built into the application and are simply re-skinned with ad graphics. Ex. 1005, [0078]. Thus, the "mini game" is no different than any other level in Hays in that they are not updated, as the claim further requires.

Hays's disclosure of "ad units that allow advertising at the beginning and end of a game and in between game levels (similar to commercials)" (Petition at 27 citing Ex. 1005, [0080]) fails for the same reasons. Ex. 2004, ¶91. Only display of the advertisement is triggered based on completion of a game or a level—the advertisement is not displayed at a particular location based on the interaction. Ex. 2004, ¶¶92-94.

The Petition also points to Hays's description that "the advertisement management service system may send bots or electronic agents into the game as advertising units or real characters in the game, which advertise or promote a product

(e.g., a game character may move around a screen holding a can of Pepsi and ask player if they would like a drink).” Petition at 28 (quoting Ex. 1005, [0079]); *see* Ex. 2004, ¶¶94-95. Specifically, Petitioner contends that “[t]he location of the game character displaying the Pepsi advertisement is based on the location of the player’s character, which is therefore based on the user interaction of arriving at that location.” Petition at 28; *see* Ex. 2004, ¶¶93-95. But that is not taught or suggested by Hays. *See* Ex. 2004, ¶¶94-95.

To the contrary, Hays describes displaying an advertisement based on the interaction, not “displaying the video-game content within the game *at a location based on user interaction*.” Ex. 2004, ¶95. Petitioner attempts to close the gap by citing to the declaration of Dr. Zagal (Petition at 28 (citing Ex. 1003, ¶123)), which should be afforded little weight. As discussed, Dr. Zagal adds nothing throughout, and this section in particular parrots the Petition nearly word-for-word. *See Xerox Corp.*, IPR2022-00624, Paper 9, at 18. And, in fact, as Dr. Akl explains, a POSITA would understand that Hays never discloses displaying that ad “at a location based on user interaction.” Ex. 2004, ¶¶86-95.

B. Ground 2: The Combination of Hays and Choi Does Not Render the Challenged Claims Obvious.

Petitioner contends that the Challenged Claims are obvious in view of Hays and Choi, specifically focusing on limitation 1[b] and claim 8. However, as

explained above, Hays fails to disclose numerous elements of claim 1, including the “checking” step of claim 1[b]. Choi fails to cure this deficiency. Ex. 2004, ¶96. Choi fails to describe what a server may do with the information (or the factors) and thus does not teach or suggest the “checking” step. Ex. 2004, ¶¶97-102. Further, Petitioner failed to show a motivation to combine Hays and Choi. Ex. 2004, ¶¶103-109.

1. Hays in view of Choi does not disclose “checking what updated video-game content to send based on one of the [claimed] factors....”

The Petition points to three paragraphs in Choi, [0083], [0086], and [0096]. Petition at 35. However, none of these paragraphs (nor any of the remaining disclosures in Choi) discloses “checking what updated video-game content to send based on one of the factors including a type of the mobile communication device, a telecom service associated with the mobile communication device, and a service provider of the telecom service.” Ex. 2004, ¶¶97-98.

First, Petitioner asserts that Choi discloses the “checking” step through “ad targeting” which uses “user demographic and contextual information.” *See* Ex. 1006, [0083]; *see* Petition at 35; Ex. 2004, ¶¶99-100. Like Hays, this “ad targeting” is not based on one of the claimed factors. Ex. 2004, ¶101. Rather, paragraph [0083] simply describes the importance of “ad targeting” without describing any particular step for targeting and without any explanation of what the “collection of user

demographic and contextual information” includes or how it could be used to perform any particular check. Ex. 1006, [0083]; Ex. 2004, ¶99.

Paragraph [0086] refers to an “instrumented application” that can “communicate its carrier identity by sending a text message to an email address monitored by the ad server; the text message will be sent as an email, and the source address domain will identify the carrier.” Ex. 1006, [0086]. This simply describes a client application that is capable of transmitting to an ad server its carrier information. Ex. 2004, ¶101. Again, there is no description whatsoever of what that ad server may do with that information, once received. Similarly, there is no suggestion that the ad server would use any carrier information to perform the “checking” step of element 1(b) and then upload updated video-game content to the mobile device as a result of doing so. Ex. 2004, ¶101.

Likewise, paragraph [0096] describes ways of determining demographic information from carrier information. Ex. 1006, [0096]. But, critically, it does not describe what a server may do with this information and thus does not describe a checking step. Ex. 2004, ¶100. Moreover, a POSITA would have understood that “ad targeting” is distinct from the “checking” factors in claim 1[b]. Ex. 2004, ¶101. Such ad targeting systems determine which ad to send based on matching an advertisement to a user based on demographics and other information. Ex. 2004, ¶101. In contrast, claim 1[b] requires a checking step based on the device type,

service provider, and similar characteristics that determine compatibility between the video-game content and the user's device. Ex. 2004, ¶101.

Further, claim 1[b] requires the opposite of Choi, by reciting using carrier information, not demographic information, to perform the claimed “checking” step. Ex. 2004, ¶101. Choi does not describe how any carrier information could be used to determine what advertisement to send. Ex. 2004, ¶101.

Dr. Zagal's “testimony” does nothing to bolster these deficiencies. His opinions in paragraph 138 of his declaration are a word-for-word copy of page 35 of the Petition and thus should receive no weight. *See Xerox Corp.*, IPR2022-00624, Paper 9, at 18. Nonetheless, Dr. Zagal incorrectly asserts that Choi's discussion of carrier information could be used in Hays's matching system. Ex. 1003, ¶138; Ex. 2004, ¶100. As Dr. Akl explains, however, a POSITA would not have been motivated to use Choi to determine a particular advertisement. Ex. 2004, ¶101. Indeed, both Choi and Hays already describe systems for targeting advertisements based on other factors. Further, Choi does not describe how to use this information, and neither does Hays. Ex. 2004, ¶101. Indeed, Hays assigns a weight to an advertisement based on the advertisement itself. Ex. 2004, ¶105. Hays does not perform any steps to check for technical compatibility of the advertisement with the factors recited in claim 1[b]. Ex. 2004, ¶105.

Thus, the combination of Hays and Choi fails to render claim 1 or 8 obvious.

2. There is no motivation to combine Hays and Choi.

A POSITA also would not have been motivated to modify Hays according to the teachings in Choi. Ex. 2004, ¶¶103-109. Hays discloses an ad server in which the server determines advertisements to send based on a weight assigned to the advertisement. Ex. 1005, [0043]. More specifically, Hays discloses an “advertisement matching and weighting system” which “calculate[s] the weight of each advertisement based on several factors including campaign goal and completion data from the advertisement serving database 122 and information regarding the specific client type from the advertisement recipient database 120.” Ex. 1005, [0043]; *see* Ex. 2004, ¶105. As noted above, this is not the same as element 1(b)’s checking step. *See* Ex. 2004, ¶105.

To address this deficiency, the Petition relies on Choi, which discloses an entirely different system for determining what advertisement to send. Petition at 35. Choi discloses “ad targeting” which “depends on collection of user demographic and contextual information.” *Id.*; Ex. 2004, ¶106. Choi, however, provides no explanation of how to use the collected information that would provide a motivation to modify Hays in light of Choi’s teachings – and the Petition does not even attempt to explain how a user would do so. Ex. 2004, ¶106.

Moreover, as Dr. Akl confirms, a POSITA would have not been motivated to combine Hays and Choi. Ex. 2004, ¶107. Hays provides a method for sending

advertisements regardless of the specific game in which it may be used. Ex. 2004, ¶108. Yet, Choi is directed to sending advertisements in “pre-existing mobile applications.” Ex. 2004, ¶108; Ex. 1006, Title. A POSITA seeking to apply advertisements broadly to many different games would not look to combine Hays with Choi due to Choi’s focus on a specific game and the technical limitations of mobile applications at this time. Ex. 2004, ¶108.

Dr. Zagal’s “testimony” fails to cure these deficiencies. His alleged motivation to combine in paragraphs 132-136 of his declaration is a word-for-word copy of the analysis in the Petition, which should carry little weight. *Compare* Ex. 1003, ¶¶132-36 *with* Petition at 32-34; *see Xerox Corp.*, IPR2022-00624, Paper 9, at 18. A POSITA would not have sought to combine a browser-based system like Hays with an application-specific system like Choi. Ex. 2004, ¶¶108-109. As discussed above, and as Dr. Akl explains, the two platforms were divergent avenues for game development at the time of invention. *Id.* A POSITA would not have sought to merge browser and application-based methods and would not have had any success in doing so. *Id.*

C. Ground 3: Hays (or Hays and Choi) in View of Chu Does Not Render Claim 4 Obvious.

Petitioner alleges that claim 4 is obvious in view of Hays (or Hays and Choi) in combination with Chu, but the proposed combination fails to teach or suggest the

claimed “information providing an in-game placement location associated with the updated video-game content.” Further, Petitioner fails to carry its burden of establishing that there is a motivation to combine Hays with Chu.

1. Hays (or Hays and Choi) in view of Chu does not teach or suggest “providing an in-game placement location associated with the updated video-game content.”

As explained above, Hays (and thus Hays and Choi) describes only that advertisements are transmitted to the client and placed in ad units. Hays fails to disclose, teach, or suggest “the step of sending information to the mobile communication device as part of the updated content, the information providing an in-game placement location associated with the updated video-game content,” and neither Choi nor Chu cures this deficiency. Ex. 2004, ¶¶110-113.

The Petition asserts that Chu “specifies locations” for advertisements and provides “[a] location object (530, 630) [that] represents the location within a game at which advertisements are to appear.” Petition at 39 (quoting Ex. 1007, 14:20-15:5). The Petition also asserts that Chu discloses sending the location information from the server to the client as claim 4 requires, but this disclosure is entirely absent from Chu. Petition at 39-40. Instead, Chu explains the opposite – how information is provided from the client to the server. Ex. 1007, 14:31-33 (“*game clients must pass the server information* such as but not limited to *the location identifiers* that uniquely identify an ad within a game....”), 14:20-15:5; Ex. 2004, ¶113. Chu does

not describe providing information from the server to the client, as the claim requires.

Indeed, as Dr. Akl explains, Chu explicitly states that “*game clients must pass the server information* such as but not limited to *the location identifiers* that uniquely identify an ad within a game....” Ex. 1007, 14:31-33; *see also id.*, 14:50-54 (“After an online game running on a game console or user computer (*client*) *requests advertising metadata and determines an ad campaign's display rules, schedule, and locations*, it requests the advertising assets that represent the advertisement.”). Each of these criteria described in Chu is sent from the client to the server, not from the server to the client as the claim requires. Ex. 2004, ¶113.

The Petition also relies on testimony from Dr. Zagal, which again adds nothing to the analysis. Dr. Zagal’s opinion consists of three paragraphs nearly identical to the Petition that should not be given any weight. *Compare* Petition at 39-40 *with* Ex. 1003, at ¶¶150-152; *see Xerox Corp.*, IPR2022-00624, Paper 9, at 18. Notably, Dr. Zagal fails to explain how Chu’s client-based system would be modified for or implemented into Hays’s server system. Ex. 2004, ¶¶114-121.

Thus, Hays (or Hays and Choi) in view of Chu fails to render claim 4 obvious.

2. There is no motivation to combine Hays (or Hays and Choi) and Chu.

A POSITA would not have found it obvious to modify Hays's system (nor the Hays-Choi combination) in light of the teachings of Chu. As an initial matter, the Petition fails to set forth any motivation to combine Choi and Chu or Hays, Choi, and Chu. The Petition only alleges that a POSITA would have been motivated to combine Hays and Chu (and Hays and Choi), but this too fails to render claim 4 obvious.

The Petition asserts that a POSITA would have been motivated to modify Hays to include "Chu's teaching of a video game requesting 'advertising metadata and schedules that determine what advertisements are to display in *specified locations* within the game,' and in turn receiving advertisements that include '[a] location object (530, 630) [that] represents *the location within a game* at which advertisements are to appear.'" Petition at 37 (quoting Ex. 1007, 14:20-15:5). While Hays discloses specific ad units on items regardless of their location, Ex. 1005, at [0073], [0074]-[0080], a POSITA would not have sought to modify Hays's specific ad units to transmit placement information. Ex. 2004, ¶118.

Indeed, as Dr. Akl explains, and as explained above, Hays is directed to an ad server which can provide advertisements across a variety of games, regardless of the specific gaming environment, while Chu is directed to a specific, online gaming

system. Ex. 2004, ¶119. Hays teaches against designing a game (or advertisement therein) in such a narrow nature. Ex. 2004, ¶119. Hays also teaches against designing gaming applications, as Hays applies only to browser-based systems. Ex. 2004, ¶119. Modifying Hays to include specific location information, as allegedly provided in Chu, would have been counterproductive to Hays's purpose and broad applicability. In fact, Hays's ad units are not fixed to a specific location and are sent "regardless of [their] location." Ex. 2004, ¶119.

Dr. Zagal asserts that "[a] POSITA would have been motivated to use Chu's teachings of the server providing to the client the specific in-game locations of advertisements because of the well-known benefits of being able to display advertisements at in-game locations." Ex. 1003, ¶147; *see* Ex. 2004, ¶118. But, in doing so, he ignores the purpose of Hays. Ex. 2004, ¶118. As Dr. Akl explains, Hays provides advertisements regardless of the location. Ex. 2004, ¶118. Based on Hays's disclosure, a POSITA would not have sought to modify Hays's system to display advertisements at in-game locations, let alone "control the location and viewing of advertisements," as Dr. Zagal erroneously asserts. Ex. 2004, ¶118. A POSITA would not have been motivated to control the location of advertisements in Hays's system which expressly provides that the ad units are sent "regardless of [their] location." Ex. 2004, ¶118.

Further, Hays teaches the server sending advertisements to be displayed at ad units. Ex. 2004, ¶119. In contrast, Chu describes requests from the client, not from the server. Ex. 2004, ¶120. A POSITA would have understood that these systems operate in different manners based on how the content is sent, *i.e.*, whether the content is pulled or pushed. Ex. 2004, ¶120. Thus, contrary to Dr. Zagal’s assertion that “[a] POSITA would have reasonably expected the proposed Hays and Chu combination to succeed,” (Ex. 1003, ¶149), a POSITA would not have reasonably expected a combination of Hays’s push system with Chu’s pull system to succeed. Ex. 2004, ¶¶120-121.

D. Ground 4: Hays (or Hays and Choi) in View of van Datta Does Not Render Claim 6 Obvious.

Petitioner alleges that claim 6 is obvious in view of Hays (or Hays and Choi) in combination with van Datta, but the proposed combination fails to teach or suggest the step of “displaying the video-game content within the game at a location based on user interaction.” Petitioner also fails to show a motivation to combine Hays with van Datta or Hays and Choi with van Datta.

1. Hays (or Hays and Choi) in view of van Datta does not teach or suggest “displaying the video-game content within the game at a location based on user interaction.”

As explained above, Hays describes triggering advertisements based on user interaction but does not teach or suggest that the advertisement is displayed at a

location based on that user interaction. Van Datta does not teach this limitation either. Ex. 2004, ¶¶122-126. Van Datta discloses an advertisement server in which a user can assign advertisements to certain areas of a game. Ex. 2004, ¶124. Van Datta explains that “[c]ertain objects in a digital medium such as a video game may be ‘tagged,’ these ‘tagged’ areas being subject to the insertion or placement of advertising content. For example, and as shown in FIG. 1A, the face of a billboard 100 may be ‘tagged’ (110) to indicate that an advertisement may be embedded in that location.” See Ex. 1009, 2:59-64; *see also id.* 5:62-6:2 (placing an advertisement on a vehicle or uniform), 7:55-8:9 (dragging-and-dropping an advertisement into a billboard), and 8:20-24 (assigning advertisements to “tagged” assets). But the advertisements of van Datta are not ***displayed*** to an end user at a location based on that user’s interaction, as claim 6 requires. Ex. 2004, ¶124. Rather, van Datta discloses only assigning advertisements, not displaying advertisements, based on a user’s interaction. *Id.* at ¶¶124-125.

Because Hays (or Hays and Choi) in combination with van Datta fails to teach or suggest “displaying the video-game content within the game at a location based on user interaction,” this combination does not render claim 6 obvious.

2. There is no motivation to combine Hays (or Hays and Choi) with van Datta.

Petitioner asserts a POSITA would have been motivated to utilize van Datta's user interactions in Hays's advertisement server. Van Datta, however, discloses an entirely different process for a step of the ad serving process than Hays, and there is no reason a POSITA would have combined those two different processes. Ex. 2004, ¶¶127-130.

Moreover, as explained above, Hays discloses specific ad units on items regardless of their location. *See, e.g.*, Ex. 1005, at [0073]; *see also id.* at [0074]-[0080]. A POSITA would not have sought to modify Hays's specific ad units to require interaction from a user nor items at a particular location. Ex. 2004, ¶128. This would have been counterproductive given Hays describes placing the ad units on items, objects, or characters, which requires no interaction from a user, nor is related to a location. Ex. 2004, ¶128. Hays is expressly agnostic to location to achieve Hays's goal of serving ads across multiple audiences and multiple platforms. Ex. 2004, ¶128. Thus, a POSITA would not have sought to modify Hays's agnostic system to provide advertisements at a specific location based on user interaction, contrary to Dr. Zagal's assertions. Ex. 2004, ¶128.

Further, a POSITA would not have had a reasonable expectation of success in modifying Hays's system according to the disclosures of van Datta. Ex. 2004, ¶129.

Hays teaches a method of sending unspecified ad units to unspecified systems. But van Datta does the opposite. Ex. 2004, ¶129. It seeks to allow users to customize placements of ads in a particular game. Ex. 2004, ¶129. As Dr. Akl explains, a POSITA would not have been motivated to modify Hays’s system to allow user customization. Ex. 2004, ¶129. Hays seeks to avoid customization and instead seeks to serve advertisements broadly. Ex. 2004, ¶129. And a POSITA would not have modified Hays to include the drag and drop functionality of van Datta which is specific to a game title. Ex. 2004, ¶130. Dr. Akl, in contrast to Dr. Zagal’s conclusory assertions, explains why a POSITA would not have had the capability to implement van Datta’s system into Hays. Ex. 2004, ¶130.

Thus, there is no motivation to modify the advertising server of Hays in the manner described in van Datta, nor reasonable expectation of success to do so.

V. GROUNDS 5-7: NONE OF THE LEVKOVITZ GROUNDS RENDERS THE CHALLENGED CLAIMS OBVIOUS.

A. Ground 5: Levkovitz Does Not Render Claims 1-3 and 5-9 Obvious.

Numerous limitations of claim 1 require that the “updated video-game content” be used “in a mobile video game.” *See* ’202 Patent, claim 1[pre] (“A method for providing updated video-game content to a mobile communication device *for use in a mobile video game*, the method comprising the steps of”), claim 1[a] (“receiving a request for the updated video-game content from the mobile

communication device, *the updated video-game content being usable in the video game* that already exists on the mobile communication device;”), claim 1[c] (“uploading updated video-game content to the communications device, *the video-game content being usable* when the video game operates on the communications device.”). Levkovitz, however, does not disclose any updated video-game content *for use* or *usable* in a mobile video game.

1. Claim 1: Levkovitz does not teach or suggest the use of “updated video-game content” in “a mobile video game” “that already exists on the mobile communication device” “when the video game operates on the communications device.”

Levkovitz discloses a system for “delivering targeted advertisements” (*i.e.*, an advertisement server). More specifically, Levkovitz describes including “advertisements or banners, within an application executed by a cellular phone,” which may include “a game.” Ex. 1008, [0005], [0123]. But nothing in Levkovitz provides or suggests that the updated video-game content (or advertisements) are intended *for use* or *usable* in a mobile game. Ex. 2004, ¶¶131-140.

Instead, as the Petition concedes, Levkovitz merely discloses “serv[ing] content items directed for presentation...” Petition at 47 (quoting Ex. 1008, [0127]); *see also id.* at [0363] (“In some embodiments, advertisements delivered using WAP to device 1501 may include, for example, textual content, audio content, graphic content, video content, informational items, coupons, promotion items, banner,

banner ads, or the like.”). This is nothing more than the placement of content such as banner ads within the game, which are not usable in the video game as the claim requires. Ex. 2004, ¶133. Petitioner contends that that content is “usable” because “the user may complete a level in the game, and the first advertisement may be presented.” Petition at 47 (quoting Ex. 1008, [0320]) (quotations omitted). But this still simply teaches that the advertisement is presented, not that it is for use or usable in the video game. Ex. 2004, ¶133.

Further, Levkovitz’s disclosure is fully consistent with the prior art discussed during prosecution, which the applicant overcame. Ex. 2004, ¶¶134-137. As discussed above, during prosecution, to overcome a rejection based on Gatto, the applicant distinguished Gatto’s description of items available for download via a hyperlink as not “usable” in the game. Ex. 1002 at 188 and 189. The applicant explained in detail that the “hyperlink” described in Gatto is not “updated ‘promotional items’ or content that would be ‘usable in’ the email ticket or a ‘video game’ itself, as opposed to a separate application program.” *Id.* at 166. Later the applicant made clear that Gatto “does not teach or suggest any updated content that is ‘useable in’ a video game.” *Id.* at 142. Rather, “[t]he available hyperlink ... causes the download of an entirely separate program or Internet page.” *Id.* Thus, the applicant expressly distinguished during prosecution the concept of a link to content

used in a separate application, like a portal to data provided by an ad server, from the claimed “usable” content.

Again, this is consistent with the understanding of a POSITA at the time of invention. Ex. 2004, ¶¶137-138. As Dr. Akl explains, a POSITA would have found the hyperlinks analogous to ads served via WAP protocol. Ex. 2004, ¶¶137-138. Ads served by browser-based or WAP-based methods are distinct from a gaming application already downloaded on the mobile device. Ex. 2004, ¶¶137-138.

Petitioner attempts to cure this deficiency by relying on Dr. Zagal, but as he does throughout his declaration, Dr. Zagal simply parrots the Petition. *Compare* Petition at 45-47 *with* Ex. 1003, at ¶¶165-69, 172. This should be afforded little weight. *See Xerox Corp.*, IPR2022-00624, Paper 9, at 18. In contrast, Dr. Akl explains how a POSITA would have understood Levkovitz at the time of the invention of the ’202 Patent, and why it does not disclose these aspects of claim 1. Ex. 2004, ¶¶139-140.

The advertisements displayed by Levkovitz are not “for use” or “usable” by the “mobile video game.” Thus, Levkovitz fails to render claim 1 obvious.

2. Claim 1[c]: Levkovitz does not disclose “uploading updated video-game content to the communications device....”

Petitioner contends Levkovitz’s ad server completes the “uploading” step of 1[c]. Levkovitz, however, does not disclose “uploading” any video-game content “to the communications device.”

Levkovitz’s ad server uses “Wireless Application Protocol” (WAP) (*i.e.*, a browser on a mobile device). As shown in Figure 7 of Levkovitz, for example, data is not uploaded to a mobile device (or any user device) in WAP Protocols. *See, e.g.*, Ex. 1008, Fig. 7; Ex. 2004, ¶142. WAP operates like a web browser that retrieves and caches content but, notably, does not require downloading or uploading content. Ex. 2004, ¶143. Indeed, Levkovitz teaches away from uploading content, as it explains that “[prior art] operations, in which content is downloaded to or uploaded from the wireless device, may consume system resources and bandwidth resources, and may require a user to pay a fee to cover the cost of using such resources.” Ex. 1008, [0003]; *see* Ex. 2004, ¶143. Levkovitz attempts to solve this problem, and consume less resources, by **not** uploading (or downloading) content. Ex. 1008, [0003]; *see* Ex. 2004, ¶143. Thus, Levkovitz does not teach or suggest “uploading updated video-game content to the communications device....” as required by claim 1.

Because Levkovitz does not render claim 1 obvious, claims 2-3 and 5-9 are also not rendered obvious. And, as addressed further below, claims 5-6 are not obvious for independent reasons.

3. Claim 5: Levkovitz does not teach or suggest “tracking what has been uploaded to the mobile communication device.”

Claim 5 adds the “step of tracking what has been uploaded to *the mobile communications device*.” Petitioner asserts that Levkovitz teaches this limitation because it discloses “log[ging] information related to presentations performed by [a] device.” Petition at 49 (quoting Ex. 1008, [0132]). Petitioner contends that the described “logging” is akin to “tracking.” Petition at 49. But the two concepts are distinct. Ex. 2004, ¶¶145-148.

Claim 5 specifically requires “tracking what has been *uploaded*” while Levkovitz describes logging what content has been presented or what presentations have been performed. Ex. 1008, [0132] (“Device 170 may store or otherwise log information related to presentations performed by device 170, e.g., data indicating the content item(s) presented, data the starting time and/or ending time of the presentations, data indicating operations performed by device 170 and/or the user of device 170 during or after the presentation (e.g., pressing a button, dialing, sending a SMS or MMS message, placing a call, or the like).”). Content (or advertisements)

could be uploaded and not presented, and *vice versa*, content could be presented but not uploaded. Ex. 2004, ¶146.

This is particularly true because Levkovitz uses WAP protocols, as shown in its figures. *See, e.g.*, Ex. 1008, Fig. 7; Ex. 2004, ¶146. With WAP protocols, a POSITA would know that data is not uploaded to the mobile device. Ex. 2004, ¶146. Instead, WAP operates like a web browser that retrieves and caches content but does not require downloading or uploading. Ex. 2004, ¶146. As Dr. Akl explains, a POSITA would understand that Levkovitz teaches presenting advertisements, but not uploading, through the WAP-based protocol described. Ex. 2004, ¶146.

Instead, a POSITA would understand that Levkovitz teaches away from uploading content. Ex. 2004, ¶147. Levkovitz explains that “[prior art] operations, in which content is downloaded to or uploaded from the wireless device, may consume system resources and bandwidth resources, and may require a user to pay a fee to cover the cost of using such resources.” Ex. 1008, [0003]; *see* Ex. 2004, ¶147. A POSITA would understand that Levkovitz consumes less resources by not uploading (or downloading) content. *See* Ex. 2004, ¶147. Thus, because Levkovitz’s WAP-based ad server does not disclose uploading content, it similarly does not disclose “tracking what has been uploaded to the mobile communication device.”

4. Claim 6: Levkovitz does not teach or suggest “displaying the video-game content within the game at a location based on user interaction.”

Claim 6 adds the requirement that the step of “uploading updated video-game content to the mobile communication device further comprises displaying the video-game content within the game at a location based on user interaction.” ’202 Patent, claim 6. Petitioner asserts that Levkovitz’s “presentation rules” disclose this limitation. Petition at 49-50,

Levkovitz’s “presentation rules” dictate when an advertisement is presented and the size of the advertisement presented. Ex. 1008, [0187] (“presentation rule[s]” requiring presentation of content items “within a pre-defined time period” or “having a [specified] size”). These “presentation rules” are not related to a location of the content and do not display the content “at a location based on user interaction,” as required by the claim. Ex. 2004, ¶150. At most, Levkovitz discloses that content may be triggered based on a *lack* of user interaction. Ex. 1008, [0187] (“a certain content item be presented only when a pre-defined period of inactivity elapses, e.g., a period in which the user of device 170 does not perform any operation, or a period in which no content items are presented.”); Ex. 2004, ¶150. A lack of interaction, however, does not meet the claim, both because it is not based on user interaction and also is not tied to a location. Ex. 2004, ¶150.

Further, Petitioner alleges that Levkovitz's disclosure of presenting an advertisement "in response to a first triggering event" is "based on a user interaction." Petition at 50 (quoting Ex. 1008, [0318]). But this too fails. Ex. 2004, ¶151. Levkovitz, at most, describes presenting an advertisement based on a user interaction. Ex. 2004, ¶151. But Levkovitz does not teach "displaying the video-game content within the game *at a location* based on user interaction." Ex. 2004, ¶151.

Petitioner cites the declaration of Dr. Zagal (Petition at 49-50 (citing Ex. 1003, ¶179)), which as discussed, nearly mimics the Petition and should be afforded little weight. *See Xerox Corp.*, IPR2022-00624, Paper 9, at 18. In contrast, Dr. Akl explains how a POSITA would have understood Levkovitz's disclosures at the time of the invention, and that Levkovitz does not display advertisements at a location based on the user interaction, as required by claim 6. Ex. 2004, ¶152.

Because Levkovitz fails to teach or suggest "displaying the video-game content within the game *at a location* based on user interaction," Levkovitz fails to render obvious claim 6.

B. Ground 6: The Combination of Levkovitz and Chu Does Not Render Claim 4 Obvious.

Petitioner asserts claim 4 is rendered obvious by Levkovitz in view of Chu. Chu, however, fails to disclose the claimed "information providing an in-game

placement location associated with the updated video-game content,” and thus, the combination of Levkovitz and Chu does not render obvious this limitation. Further, Petitioner failed to show a motivation to combine Levkovitz and Chu.

1. Levkovitz and Chu do not teach or suggest “providing an in-game placement location associated with the updated video-game content.”

The Petition solely relies on disclosures in Chu to allege that this limitation is met. Specifically, the Petition asserts that “Chu discloses that a video game requests ‘advertising metadata and schedules that determine what advertisements are to display in *specified locations* within the game,’ and in turn receiving advertisements that include ‘[a] location object (530, 630) [that] represents *the location within a game* at which advertisements are to appear.’” Petition at 54 (quoting Ex. 1007, 14:20-15:5 and citing Ex. 1003, ¶190). As explained with the Hays combination, Chu, instead, describes the opposite of the claimed invention.

Specifically, claim 4 requires that the *server* send information providing an in-game placement location with the updated content, but Chu describes that information is provided from the client to the server. *See* Ex. 1007, 14:31-33 (“*game clients must pass the server information* such as but not limited to *the location identifiers* that uniquely identify an ad within a game...”); *see also id.*, 14:50-54. The Petition does not cite testimony from Dr. Zagal (or any other evidence) to show that it would have been obvious to modify the Levkovitz-Chu combination to

“send[]” “the information providing an in-game placement location associated with the updated video-game content” “*to the mobile communication device* as part of the updated content,” rather than to the server. Ex. 2004, ¶¶154-157. In fact, it would not have been obvious to do so as described further below. Ex. 2004, ¶¶158-163.

Thus, the combination of Levkovitz and Chu fails to render claim 4 obvious.

2. There is no motivation to combine Levkovitz and Chu.

Petitioner asserts that a POSITA would have been motivated to modify the ad server of Levkovitz to “include Chu’s teaching of a video game requesting ‘advertising metadata and schedules that determine what advertisements are to display in specified locations within the game.’” Petition at 52. Petitioner further asserts that this would result in “receiving advertisements that include ‘[a] location object (530, 630) [that] represents the location within a game at which advertisements are to appear.’” Petition at 52 (quoting Ex. 1007, 14:20-15:5) (alternation in original).

Levkovitz describes a method for presenting advertisements from a server to a client device. Ex. 2004, ¶159. Chu, however, describes a method in which information is provided from the client to the server. Ex. 1007, 14:31-33 (“*game clients must pass the server information* such as but not limited to *the location identifiers* that uniquely identify an ad within a game....”); see Ex. 2004, ¶¶159-161.

Chu's teaching is opposite from Levkovitz's teaching of delivering targeted advertisements. Ex. 2004, ¶162. Levkovitz relates to the server sending specified ads while Chu only relates to information sent from the client, not communications from the server. Ex. 2004, ¶162. A POSITA would, thus, have not been motivated to combine these two systems as they operate in opposite manners. Ex. 2004, ¶161.

Moreover, Petitioner did not show that this teaching could be modified with testimony from Dr. Zagal. Dr. Zagal's testimony is conclusory and merely parrots the Petition, which should carry little weight. *Compare* Petition at 54 *with* Ex. 1003, at ¶¶189-91; *see Xerox Corp.*, IPR2022-00624, Paper 9, at 18. In stark contrast, Dr. Akl thoroughly explains why a POSITA would not have been motivated to modify these teachings or combine them. Ex. 2004, ¶¶159, 161. Indeed, as Dr. Akl explains, Levkovitz seeks to serve advertisements broadly, like an ad banner. Ex. 2004, ¶¶159, 163. A POSITA would not seek to modify Levkovitz's broad system with Chu's narrow disclosure of placing ads at a particular location. Ex. 2004, ¶¶160, 163. Even so, such a modification would not arrive at the claimed invention, as described above.

Thus, Petitioner has not shown that a POSITA would have been motivated to combine Levkovitz and Chu.

C. Ground 7: Levkovitz in view of van Datta Does Not Render Claim 6 Obvious

Petitioner asserts claim 6 is rendered obvious by Levkovitz and van Datta. As explained above, Levkovitz fails to disclose “uploading updated video-game content to the mobile communication device further comprises displaying the video-game content within the game at a location based on user interaction,” and van Datta does not cure this deficiency. Ex. 2004, ¶¶164-167.

1. Levkovitz and van Datta do not teach or suggest that “uploading updated video-game content to the mobile communication device further comprises displaying the video-game content within the game at a location based on user interaction.”

As explained with Ground 5, Levkovitz teaches displaying an advertisement based on a triggering event or user interaction, but Levkovitz fails to teach that an advertisement is displayed at a particular location “*based on the user interaction.*” Van Datta fails for the same reasons. As explained with the Hays-van Datta combination, van Datta simply discloses an advertisement server in which a user can assign advertisements to certain areas of a game. Ex. 2004, ¶166. The advertisements in van Datta are not “displayed ... at a location based on user interaction,” as recited by claim 6 which requires an interaction from an end-user. Ex. 2004, ¶166. Claim 6 ties the location of the updated video-game content and the display of the updated video-game content to the user interaction, but this connection between the placement of the advertisement, display of the advertisement, and the user

interaction is absent from van Datta and Levkovitz. This is confirmed by testimony from Dr. Akl. Ex. 2004, ¶166.

2. There is no motivation to combine Levkovitz and van Datta.

A POSITA would not have sought to combine the teachings of van Datta and Levkovitz for this reason—the POSITA would not have wanted the player of a game to select the placement location of advertisements that the same game player will later view. The two systems are inherently distinct. Ex. 2004, ¶168.

Because the Levkovitz-van Datta combination fails to disclose “displaying the video-game content within the game at a location based on user interaction,” claim 6 is not obvious.

VI. OBJECTIVE INDICIA SHOW THE NON-OBVIOUSNESS OF THE CHALLENGED CLAIMS

“The objective indicia analysis is ... a fundamental part of the overall § 103 inquiry.” *Liqwd, Inc.*, 941 F.3d at 1137 (Fed. Cir. 2019) (citation omitted). It is an essential safeguard that protects against hindsight bias. *In re Cyclobenzaprine Hydrochloride Extended-Release Capsule Pat. Litig.*, 676 F.3d at 1079.

Petitioner asserts that the challenged claims would have been obvious in 2007, but the real-world evidence, including evidence cited by Petitioner, shows that mobile phone developers experienced difficulty with creating new features or levels in game that would not require significant space associated with downloading an

entire new game. Ex. 2004, ¶170. There thus was a long-felt need for the invention of the '202 Patent before June 2007. There is a specific nexus between this long-felt need and the claimed invention, because the claim itself provides the solution for providing “updated video-game content to a mobile communication device for use in a mobile video game.”

Indeed, at the time of the invention of the '202 Patent, the mobile game landscape was very different. Ex. 2004, ¶171. App stores were not available, and each wireless carrier had to manage their own offering of mobile games. Ex. 2004, ¶¶170-171. Further, game engines, or the software architecture necessary to develop games (like the invention of the '202 Patent) was not yet developed, which led to a short lifecycle for games. Ex. 2004, ¶¶170-171.

Game development in other contexts (e.g., console games) did not face the same issues. Ex. 2004, ¶171. And the issues and constraints were even tighter in the context of mobile gaming, with the added restriction of size limitations on mobile devices. Ex. 2004, ¶171. At the time, the only way in which games could be “updated” was to download a new version of the game in its entirety. Ex. 2004, ¶171. This was not practical to do on a mobile device with great size and storage limitations. Ex. 2004, ¶171. The '202 Patent was revolutionary in its time and solved this problem by sending updated video-game content without requiring that the game be downloaded anew and in its entirety. Ex. 2004, ¶¶169-171.

The documents cited as background in the Petition also show that there was a long-felt need for the invention of the ‘202 Patent. Ex. 2004, ¶¶172-175. For example, documents identified by Playrix include an article that states that “suggestive events for the future of online gaming took place in the [Australian] spring of 2007” (*PLR Worldwide Sales Ltd. v. Flip Phone Games Inc.*, IPR2024-00133, Ex. 1015 at 1)—confirming that, as of its June 26, 2007 priority date, the invention provided by the Asserted Patents was novel and absent from the current art. *Id.*; see Ex. 2004, ¶175. Additional documents identified by Playrix suggest the novelty and long-felt need of the inventions claimed in the Asserted Patents, stating 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; see Ex. 2004, ¶175; see also Ex. 1017 at 1 (“In the near future, mobile in-game advertising will become increasingly attractive for providers of mobile phones.”).

Likewise, a 2001 article also similarly confirms that in-game content updates, were needed before the claimed invention of the Asserted Patents. Ex. 1018; see Ex. 2004, ¶172. The article expressly 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 real-time interactivity.” Ex. 1018 at 50 (emphasis added); see Ex. 2004, ¶175. Further, this article confirms exactly the need to address the problem that the Asserted Patents 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* Ex. 2004, ¶175. This evidence of long-felt need also confirms that the inventions of the Asserted Patents are not obvious.

The prior art also taught away from the claimed invention of the ’202 Patent. In particular, the prior art taught away from providing “updated video-game content to a mobile communication device for use in a mobile video game.” At the time of the invention of the ’202 Patent, programmers could not update any video-game content in a game on a mobile device without re-downloading an entire application. Ex. 2004, ¶171. To overcome this problem, prior art references, like Levkovitz, sought to serve video games and associated advertisements via browsers, which operated in a distinct manner from the claims of the ’202 Patent. Ex. 2004, ¶¶47-49.

The prior methods, which were not downloaded and instead accessed via the web, allowed developers to serve ads more easily. Ex. 2004, ¶48. The developers could issue new games without requiring users to download or pay for an entire new version. Ex. 2004, ¶47. A developer seeking to update game video-game content or publish a new ad campaign on a mobile device would have sought to do so via a browser or WAP-based game as these features were not available in gaming applications at that time. Ex. 2004, ¶¶47-48. These prior art methods taught away from using the application-based invention of the ’202 Patent (*see* Ex. 2004, ¶171),

and this evidence also confirms that the inventions of the Asserted Patents are not obvious.

VII. MULTIPLE OF PETITIONER’S PRIOR ART REFERENCES ARE NOT “PRINTED PUBLICATIONS” WITHIN 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 “publication” as of the ’202 Patent’s priority date of June 26, 2007. *See* Petition at 3.

Hays was filed on March 8, 2005, but did not publish until May 1, 2008 (*i.e.*, after the June 26, 2007, priority date of the ’202 Patent). Ex. 1005, at 1. And Hays never issued as a patent. Likewise, Choi was filed on January 19, 2007, but did not publish until July 26, 2007 (*i.e.*, after the June 26, 2007, priority date of the ’202 Patent). Ex. 1006, at 1. Choi also never issued as a patent.

Each of Hays and Choi is only a “printed publication” under § 311(b) as of the date it became available to the public—*i.e.*, after the June 26, 2007, priority date of the ’202 Patent. *See* Petition at 3. 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”). Neither Hays nor Choi was accessible to the public before June 26, 2007.

Thus, neither is available as prior art, as 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 that burden here. For example, Petitioner fails to contend that either Hays or Choi was publicly accessible prior to the ’202 Patent’s priority date of June 26, 2007. Nor can it. Hays was not published until May 1, 2008, and Choi was not published until July 26, 2007—each after the ’202 Patent’s priority date of June 26, 2007. Both Hays and Choi were thus not “accessible to the public” until after the ’202 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 each of Hays and Choi is “prior art under pre-AIA § 102(e)” does not demonstrate otherwise. Petition at 8, 10. In doing so, Petitioner

expressly relies on the **filing date** of each of Hays and Choi as the effective prior art date. 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 Prod., 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 Office “shall be kept in confidence by the Patent and Trademark 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); *In re Wertheim*, 646 F.2d 527, 532 (CCPA 1981) (application “was not ... a patent or 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, Hays (Ex. 1005) and Choi (Ex. 1006) are not “prior art consisting of patents or printed publications” under § 311(b) and are therefore ineligible to be prior art in an IPR.³ Accordingly, each of Grounds 1–4 fails because it relies on the ineligible Hays and/or Choi references. *See* Petition at 2.

VIII. CONCLUSION

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

Dated: July 23, 2024

Respectfully submitted,

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³ 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).

CERTIFICATE OF WORD COUNT

Pursuant to 37 C.F.R. § 42.24(d), the undersigned certifies that this Response contains 13,792 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)(1).

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CERTIFICATE OF SERVICE

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