

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. IPR2024-00200

Patent No. 11,117,056

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	Prosecution History of U.S. Patent No. 9,731,202
2003	U.S. Patent No. 9,731,202 (the '202 Patent)
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 1-16 (the “Challenged Claims”) of U.S. Patent No. 11,117,056 (the “’056 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 ’056 Patent: updating content without updating the entire mobile video game. The ’056 Patent allows for these updates based on claimed steps of checking what updated 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 the two independent claims, as described below. None of the references discloses “send[ing] a message relating to the in-game video game content to the mobile communication device in response to receiving the request, wherein the message is pre-selected by the server based on” factors associated with the mobile device. Further, independent

claim 9 separately requires “pre-selected in-game video game content *for use* in a video game,” which is not disclosed in any of the prior art and which limitation the Petition wholly ignores. And, as explained, the Petition fails as to several dependent claims for additional reasons.

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 ’056 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, ¶28. 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. PRIORITY DATE

As expressly recognized by Petitioner, the relevant time for the Board to consider is the claimed priority date of the ’056 Patent: June 26, 2007. *See* Petition at 1. The ’056 Patent is a continuation of U.S. Application No. 15/645,028, which is a divisional of U.S. Application No. 11/768,892 (the “’892 Application”), which was filed on June 26, 2007. ’056 Patent, at 1:4–6. The ’056 Patent thus shares “substantially the same specification” as the ’892 Application (now U.S. Patent No. 9,731,202). *Two-Way Media Ltd. v. Comcast Cable Commc’ns, LLC*, 874 F.3d 1329, 1332 (Fed. Cir. 2017).

Written description support for the Challenged Claims of the ’056 Patent, respectively, is found in at least the following non-limiting portions of the ’892 Application (Ex. 2002 at 293-337), respectively:

’056 Patent, Claim Element¹	Example Support in the ’892 Application (Filed June 26, 2007)
1[pre]	[0009], [0011], [0031], [0036], [0040], Figs. 3A, 3B, 4B.

¹ *See* Petition at List of Challenged Claims.

'056 Patent, Claim Element¹	Example Support in the '892 Application (Filed June 26, 2007)
1[a]	[0018], [0032], [0039], [0078], [0090] Fig. 1.
1[b]	[0030], [0036], [0038]-[0040], Figs. 1, 3A, 3B.
1[c]	[0038], [0063], [0092], [0094], Figs. 1, 4B.
1[d]	[0036], [0040], [0052], [0058]-[0063], Figs. 3A, 3B, 4B.
1[e]	[0019], [0040], [0066], [0069]-[0070], [0090], [0094], [0096] Figs. 3A, 3B, 4B, Claim 24.
1[f]	[0040], [0065], [0097] Figs. 3A, 3B, 4A, 4B, Claim 15
2	[0047], [0069], [0097], Claim 2.
3	[0041], [0097], Claim 29.
4	[0019], [0070], [0094], [0096], Claim 24.
5	[0016], [0019], [0081], Claim 22, Fig. 3B.
6	[0017], [0020], [0066]-[0067], Claim 17.
7	[0017], [0020], [0066], [0077], [0101], Claim 26.
8	[0052], [0061]
9[pre]	<i>See</i> Claim 1[pre].
9[a]	[0018], [0039], [0078], Fig. 1, Claims 1, 12, and 20.
9[b]	<i>See</i> Claim 1[c].
9[c]	<i>See</i> Claim 1[d].
9[d]	<i>See</i> Claim 1[e].
9[e]	<i>See</i> Claim 1[f].
10	<i>See</i> Claim 2.
11	<i>See</i> Claim 3.
12	<i>See</i> Claim 4.
13	<i>See</i> Claim 5.
14	<i>See</i> Claim 6.
15	<i>See</i> Claim 7.
16	<i>See</i> Claim 8.

IV. BACKGROUND

A. Mobile Gaming Technology Was Entirely Different as of the June 26, 2007, Priority Date of the '056 Patent.

As of the priority date of the '056 Patent, June 26, 2007, as Dr. Akl explains, the claimed invention was both novel and non-obvious. Ex. 2004, ¶¶34-39. 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, ¶¶40-42.

The '056 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.” Ex. 2003, 2:7-11²; *see also* Ex. 2004, ¶37. The innovative mobile gaming technology claimed in the '056 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 to which the '056 Patent claims priority, that modern App Stores became available.³ Ex. 2004, ¶40. Before that time, mobile games had a very short life cycle. Ex. 2004, ¶¶41-42.

² The '056 Patent claims priority to U.S. Patent No. 9,731,202 (the '202 Patent), which is challenged in IPR2024-00132. Citations to the specification are to the '202 Patent (Ex. 2003).

³ *See, e.g.,* <https://www.apple.com/newsroom/2018/07/app-store-turns-10/>; <https://pickaso.com/en/2020/google-play-store-evolution>

Wireless carriers each managed their own individual app store or “deck,” with a limited catalog of games (typically several hundred titles). Ex. 2004, ¶42. 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, ¶42.

As the '056 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.” *Id.* at 1:28-32; *see also* Ex. 2004, ¶36. 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, ¶41. Rather, mobile games were a one-time purchase, typically \$4.99 to \$9.99 each. Ex. 2004, ¶45. 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, ¶¶43-45. 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, ¶36. Thus, as of the priority date of the '056 Patent, 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, ¶45.

The '056 Patent's claims provide a unique solution to the problem of updating 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.* at 4:31-45; *see also* Ex. 2004, ¶37. 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, ¶46.

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 '056 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, ¶233. 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 '056 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 7. The references, in fact, explain how the concept of updating video game content in a video game was not an operation performed by the ad servers described in these articles. Ex. 2004, ¶¶232-233.

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 ’056 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 spring⁴ of 2007” (Ex. 1015 at 1 (emphasis added)) confirming that as of the June 2007 priority date, the invention provided by the ’056 Patent was novel. Ex. 2004, ¶237.

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,

⁴ 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>

¶¶235, 237. And indeed, as discussed in further detail below, such in game advertising is not updated content “used” in the videogame. Ex. 2004, ¶235.

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 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, ¶236. 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, ¶237. Thus, this press release does not describe prior art, but merely describes what may happen in the *future*. Ex. 2004, ¶¶236-237.

Finally, the Petition relies on Exhibit 1018, purportedly published in 2001. *See, e.g.*, Petition at 7; *see also* Ex. 2004, ¶234. Petitioner likewise submits no evidence corroborating the date of alleged publication or authenticating this Exhibit. Exhibit 1018 similarly never shows what was available as of the June 2007 priority date of the '056 Patent. Ex. 2004, ¶¶234, 237. 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, ¶237. Further, this

article confirms exactly the need to address the problem that the '056 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, ¶237.

V. GROUNDS 1-3: 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. Claims 1[e] and 9[d]: Hays does not disclose “wherein the message is *pre-selected* by the server....”

Hays describes an advertising matching and weighting system. In particular, 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, ¶¶152, 54. Thus, Hays selects advertisements (the alleged pre-selected in-game 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, ¶¶152, 54. Thus, while Hays

describes weighting advertisements for selection, Hays never describes transmitting a message that is pre-selected by the server.

The Institution Decision suggests that “the parties may wish to address the interpretation of the phrase ‘pre-selected in-game video game content’” (Paper 9 at 9), and “it appears that a message that is selected any time before sending would be a ‘pre-selected’ message.” This is an overly broad interpretation of the claim. A message identified based on the claimed factors and sent could be “selected” and sent. But extending the claim to all selected messages gives no meaning to pre-selected. Further, merely “selecting” a message from stored data does not give effect to the claim because all data is stored before selection and selecting that data does not show pre-selection of a message, as required. Claims 1 and 9 confirm as much, by making it clear that a message is pre-selected based upon various factors related to the mobile communications device or its service provider. Thus, content is not shown to be pre-selected by selecting it from storage and sending.

The Petition similarly fails to ascribe any meaning to pre-selected and never distinguishes between the selection of an advertisement and a message that is pre-selected, as the claim requires. Indeed, with respect to “pre-selected,” the Petition states merely:

Hays discloses that ‘advertisers can target the delivery of their advertisement campaign specifically to a sub-channel as that sub-channel relates to their campaign,’ where a sub-channel includes ‘genre

such as sports titles ..., children's titles, racing titles, etc.,' or 'may subtarget by time of day (e.g., deliver advertising to all gaming devices playing at 8 p.m. on Thursday) or by game play date (e.g., once the game has been played for 45 minutes—air the Domino's ad campaign, or in the fourth inning of the sports title, air the XYZ campaign). Ex. 1005, ¶22. In other words, Hays teaches that advertisers can *pre-select* which advertisements to deliver to which genre of games or which time of the day or which event within the game.

Petition at 20 (citing Ex. 1003, ¶89). This conclusory statement never addresses whether the message is pre-selected. Rather, the Petition urges that the advertisement itself is pre-selected. First, this is irrelevant to the claim language. Second, as explained, the ad-targeting system discussed in Hays for selecting advertisements, does not pre-select an advertisement as the Petition seems to suggest.

The only paragraph of Hays the Petition cites as meeting the “pre-selected” limitation, paragraph [0022], describes “the advertisement server may then (through matching and optimization) distribute and deliver targeted advertisements to players' gaming devices, where the advertisements may be integrated into the relevant game areas in real time.” Ex. 1005, [0022]. This “real time” ad targeting “through matching and optimization” says nothing of “pre-selected” advertisements. Ex. 2004, ¶¶152, 55. To the contrary, it selects advertisements in “real time,” meaning that these advertisements are necessarily not “pre-selected.” Ex. 2004, ¶¶152, 55.

The remainder of the paragraph includes no further description of “pre-selected,” instead it discusses the various data points that may be used for the “real time” by “target[ing] the delivery of their advertisement campaign specifically to a sub-channel as that sub-channel relates to [the advertising] campaign.” Ex. 1005, [0022]; Ex. 2004, ¶¶152, 58. These “sub-channels” relate to the location of “available advertisement spaces,” in groups of games, which “can be divided by genre such as sports titles (and even further by specific sport), children’s titles, racing titles, etc.” Ex. 1005, [0022]. Thus, these “sub-channels” have to do with the target for a particular advertisement, e.g., in a particular game or at a particular time of day. This is irrelevant to whether a particular advertisement is “pre-selected,” much less whether a message is pre-selected. Rather, this is simply a further description of how an advertisement is targeted to a particular category of game or game player, such that multiple players may see the same advertisement. Ex. 2004, ¶¶152, 57-58. As Hays describes the sub-channel “targeting may include the game devices of game players involved in multiplayer games (who may all see the same advertisement simultaneously).” Ex. 1005, [0022]. But this is irrelevant to whether a message was “pre-selected,” versus simply being selected. Ex. 2004, ¶¶152, 58.

Thus, rather than addressing the claim element, which requires “the message is *pre-selected* by the server” the Petition instead conflates this element with a weighting process that selects an advertisement. But a weighting system would

necessarily not pre-select an advertisement because pre-selection would undo the benefit of real time weighting as explained. The Petition offers no additional analysis for the other independent claim, claim 9. *See* Petition at 30. Thus, the Petition’s analysis of this claim element does not address these distinctions between Hays and the Challenged Claims of the ’056 Patent and cannot carry its burden of establishing obviousness.

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

Petitioner relies on Dr. Zagal in an attempt to bolster the Petition’s analysis of this claim element, but this too fails. Dr. Zagal adds nothing to the analysis. Rather, his entire “opinion” is nothing more than parroting the Petition almost word-for-word. *Compare* Petition at 18-21 (addressing element 1(e)) *with* Ex. 1003, ¶¶101-107. Indeed, Dr. Zagal does not add anything at all to the analysis. Rather, he simply repeats the text of the Petition almost *verbatim*. And as with the Petition, Dr. Zagal does not separately address claim 9. *See* Ex. 1003, ¶135. He thus cannot bolster the Petition’s faulty analysis.

Such parroting adds nothing to the Petition—which as discussed is insufficient—and Dr. Zagal’s parroting should be afforded no weight, to the extent it is accepted at all. *Xerox Corp. v. Bytemark, Inc.*, IPR2022-00624, Paper 9, at 18 (PTAB Aug. 24, 2022) (precedential) (denying institution where Petitioner’s expert

“offers only a *verbatim* restatement of the assertion being supported, without any supporting evidence or technical reasoning.”).

3. Claims 1[e] and 9[d]: Hays does not disclose “wherein the message is pre-selected by the server based on” claimed factors

Petitioner contends Hays’s advertising matching and weighting system meets this claim element. *See* Petition at 25. Hays does not disclose pre-selecting a message based on any of the factors required by these claims. Ex. 2004, ¶¶153-162. 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, ¶154. Thus, Hays is clear that weights are assigned, or advertisements are matched, based on factors associated with *the advertisements*. Ex. 2004, ¶155. Indeed, Hays selects advertisements 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, ¶154.

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, ¶155; Ex. 1005, [0043]. Further,

this assigned weight is “relative to other advertisements in the set,” and thus the weighting is between individual advertisements. Ex. 1005, [0043]. In contrast, claims 1 and 9 require the use of the explicitly recited factors related to the mobile communication device, i.e., “a model type associated with the mobile communication device, a service subscription associated with the mobile communication device, or a service provider for the service subscription associated with the mobile communication device.” These factors are related to the mobile device receiving the data, not the data itself. Ex. 2004, ¶155. In contrast, Hays weights the data (i.e., the advertisements) against other advertisements for targeting purposes. Ex. 1005, [0043]; Ex. 2004, ¶¶155. And Hays targets advertising based on “campaign goal and completion data” (Ex. 1005, [0043]) or “specific demographic characteristics of a game player.” (*id.*, [0044]). Ex. 2004, ¶¶154-157. This information can include information such as “information regarding the specific client type from the advertisement recipient database 120.” Ex. 1005, [0043]. But again, this is used to “calculate the weight of each advertisement,” not to pre-select the advertisement, much less “the message,” as the claim requires. Ex. 2004, ¶¶154-157.

The Petition further suggests that Hays discloses that advertisement targeting is “based on ‘demographic information about a game player collected via the use of an IP address,’ which for a mobile communication device connected to a cellular

network would be the IP address associated with the cellular service provider (such as AT&T or Verizon).” Petition at 21 (quoting Ex. 1005, [0044]). First, this paragraph does not disclose targeting advertising based on an IP address, as the Petition attempts to suggest, but rather “client data storage 260 contains demographic information regarding a specific game player” and that “it may contain demographic information about a game player *collected via the use of an IP address*, including information tracked by the advertisement management service system 108.” Ex. 1005, [0044]. At most, this discusses storing information collected “via the use of an IP address,” not targeting based on an IP address. Second, as with the demographic information above, this information “collected via the use of an IP address,” is used by an advertising and weighting system to weight advertisements. Ex. 2004, ¶¶157-157. This does not disclose or suggest the claimed “message [] pre-selected by the server based on” factors associated with the mobile device.

A POSITA would also understand that Hays’s matching and weighting system is distinct from the step recited by claims 1 and 9, because these claims require a compatibility determination with the user’s mobile device. Ex. 2004, ¶¶159-160. This step requires that “the message is pre-selected by the server based on,” the factors required by the claims. Ex. 2004, ¶158. A POSITA would have understood that, at the time of the invention, this would have required checking for compatibility of the message with the mobile device and service provider, which operated on

different platforms. Ex. 2004, ¶¶159-161. In contrast, Hays is simply comparing and weighting or ranking advertisements, not the recited factors. *Id.*

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 18-21 (addressing element 1(e)) *with* Ex. 1003, ¶¶101-107; *see Xerox Corp.*, IPR2022-00624, Paper 9, at 18. Thus, the Petition fails with respect to either of claims 1 and 9 for this additional reason.

Because Hays does not render claim either claims 1 or 9 obvious, claims 2-8 are also not rendered obvious and 10-16 are similarly not rendered obvious. And, as addressed further below, claims 4, 5, 7, 8, and 9-16 are allowable for additional reasons.

4. Claims 9-16: Hays does not disclose “pre-selected in-game video game content” as required by claim 9.

Claim 9 further requires that the “in-game video game content” is pre-selected. *See* claim 9, elements 9[a] (“storing, on a storage medium, ***pre-selected*** in-game video game content for use in a video game”); 9[c]; 9[e]. The Petition does not address this additional requirement at all. To the contrary, the Petition simply refers back to claim 1, which does not recite this element, and the analysis in the Petition does not address “***pre-selected*** in-game video game content,” anywhere with respect to Hays. *See* Petition at 30. Indeed, the phrase “***pre-selected*** in-game video game

content” never appears in the body of the Petition, and instead only appears in the heading on page 30. Dr. Zagal does not bolster this analysis as “*pre-selected* in-game video game content” also never appears in the body of his declaration.

Thus, the Petition fails to carry its burden with respect to this claim element, and claim 9 and all of its dependent claims are patentable over Hays. *See* Ex. 2004, ¶¶174-175.

5. Claims 9-16: Hays does not disclose “in-game video game content *for use in a video game*” as required by claim 9.

Claim 9 further requires that the “in-game video game content” is “for use in a video game.” *See* claim 9[a]. As with the elements of claim 9 discussed above, the Petition does not address “video game content for use in a video game” at all. This claim element is required by claim 9, but not by claim 1, yet the Petition addresses only claim 1 without separately addressing claim 9. *See* Petition at 30. Indeed, the words “for use” do not appear anywhere in the analysis of the Hays grounds. Similarly, and as above, Dr. Zagal does not bolster this analysis and does not address this claim element. Thus, the Petition fails to carry its burden with respect to this claim element, and claim 9 and all of its dependent claims are patentable over Hays.

Even if the Petition had addressed this element—it did not, and Petitioner should not be authorized to bolster this failure on Reply—it could not establish that Hays discloses the limitation requiring “use.” 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, ¶¶176-177, 61-74. Hays does not disclose that its advertisements are “for use” in the video game. Instead, Hays is limited to displaying advertisements from external providers. Ex. 2004, ¶¶176-177, 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, ¶¶176-177, 64, 71-72.

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 “for use” in a 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, ¶¶176-177, 71. 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 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, ¶¶176-177, 71-72. As Dr. Akl explains, the ad units are graphical “skins” that are displayed on items that are already present in the game. Ex. 2004, ¶¶176-177, 72. 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, ¶¶176-177, 64, 71-72. 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, ¶¶176-177, 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.” Ex. 1005, [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. Ex. 2004, ¶¶176-177, 71-72. Hays thus does not disclose “in-game advertising *for use* in a video game.”

Hays’s disclosure is similar to the prior art discussed during prosecution of the ’202 Patent, to which the ’056 Patent claims priority. *See* Ex. 2002. There, 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, ¶¶176-177, 65-68. 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. 2002 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.”), 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, ¶¶176-177, 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.” Ex. 2002 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, which is similar to Hays’s ad unit in with a skin that is provided by an ad server, from that application’s claimed “in-game advertising *for use* in a video game.” Ex. 2004, ¶¶176-177, 67-68.

6. Claims 4 and 12: Hays does not disclose “identifying what in-game video game content to send is based on” claimed factors.

The Petition does not include any further analysis of this claim element beyond what is discussed above regarding claims 1 and 9. *See* Petition at 24; Ex. 2004, ¶¶163-164, 179. As discussed above, the Petition does not establish that the “advertising matching and weighting system 220” meets the requirements of claim 1 and 9, and it similarly does not establish that the same system meets this *additional* requirement of claims 4 and 12, in particular with no further analysis to explain how

the exact same component meets elements requiring both that “the message is pre-selected by the server based on” certain factors (claims 1 and 9) and to “identify[] what in-game video game content to send is based on” certain factors (claims 4 and 12). Petitioner, apparently, ascribes the identical meaning to pre-selecting a message and “identifying ... in-game video game content,” but offers no explanation at all for how the same component could perform both operations at exactly the same time.

7. Claims 5 and 13: Hays does not disclose “send[ing] information [from the server] to the mobile communication device regarding the in-game placement location of the in-game video game content.”

Claims 5 and 13 both require that the server “send[s] information to the mobile communication device regarding the in-game placement location of the in-game 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 26. While Hays describes pre-designated locations for “ad units,” Hays never discloses send[ing] information [from the server] to the mobile communication device regarding the in-game placement location of the in-game video game content.” Ex. 2004, ¶¶165, 180, 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 advertisements it never discloses transmitting any information regarding the placement location of an advertisement. Ex. 2004, ¶¶165, 77. 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, ¶¶175, 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 24-26 (addressing claim 3) *with* Ex. 1003, ¶¶119-123; *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, ¶¶165, 75-80. As Dr. Akl provides, a POSITA would understand that Hays does not send

location information with advertising. Ex. 1005, [0073]; Ex. 2004, ¶¶165, 78. Thus, Hays fails to teach or suggest either of claims 5 or 13.

8. Claims 7 and 15: Hays does not disclose that the “server is further configured to track the distribution of updated content.”

Petitioner contends that Hays discloses “tracking” and “recording” what advertisements have been sent. But this “tracking” is not related to “the distribution of updated content,” 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, ¶¶166, 181, 93-97. This fails for two reasons: first, “session” data would not represent all of the uploaded content that was uploaded to a mobile communications device in its entirety; and second, “session” data would not show what has been sent to the mobile communications device. Ex. 2004, ¶¶166, 93.

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 uploaded to the mobile device. Petition at 29-30 (citing Ex. 1005, [0038], [0045], [0025]); Ex. 2004, ¶¶166, 93-95. 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, ¶¶166, 93. Paragraph [0045] is similarly limited to an “active session.” Ex. 1005, [0045]; Ex. 2004, ¶¶166, 93.

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 30; Ex. 2004, ¶¶166, 95. But this is related to the advertisement itself, not “the distribution of updated content,” and it in no way addresses what content was distributed. Ex. 2004, ¶¶166, 95. At most, it describes information regarding the presentation of an advertisement, rather than when an advertisement has been uploaded. Ex. 2004, ¶¶166, 95-96.

As with the other claims above, 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 27-28 (addressing claim 7) *with* Ex. 1003, ¶¶128-131; *see Xerox Corp.*, IPR2022-00624, Paper 9, at 18. Hays thus fails to disclose “track[ing] the distribution of updated content,” as claims 7 and 15 require.

9. Claims 8 and 16: Hays does not disclose that “the server is further configured to check for availability of bandwidth before sending the updated content to the mobile communication device.”

With respect to “check[ing] for availability of bandwidth before sending the updated content to the mobile communication device,” the Petition completely ignores that this step requires a specific step to “check for availability of bandwidth.” Instead, the Petition urges that advertisements “downloaded in the background” or “sporadically [or] periodically” meet this claim. *See* Petition at 29. But neither of these disclose the specific step of checking for the availability of bandwidth, and such an operation is never disclosed or suggested in Hays. Ex. 2004, ¶¶168-173, 182. Rather, the cited paragraphs of Hays simply describe transmitting when a connection is made. *See* Ex. 1005, [0034] (“advertisements may be downloaded ‘in the background’ during times when the advertisement recipient client 104 *is connected* to the advertisement management service system 108.”), [0021] (“When a game is played at a player’s gaming device (e.g., computer or game console) that *is connected* to an advertisement server (e.g., via the Internet or another connection), the client library functions associated with the game application may pull media data from the advertisement server.”). Neither of these discloses or suggests the checking for the availability of bandwidth, as the claims require.

As with the other claims above, 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 28-29 (addressing claim 8) *with* Ex. 1003, ¶¶131-134; *see Xerox Corp.*, IPR2022-00624, Paper 9, at 18. Hays thus fails to disclose the bandwidth checking required by claims 8 and 16.

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. As explained above, Hays fails to disclose numerous elements of both claims 1 and 9. The Petition does not establish that Choi cures any of these deficiencies.

1. Claims 1[e]/9[d]: Hays in view of Choi does not disclose “the message is pre-selected by the server based on” 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 “the message is pre-selected by the server based on” the claimed factors.” Ex. 2004, ¶¶183-187.

First, the Petition never addresses pre-selected at all with respect to Choi, and thus the Petition does not and cannot establish that Choi cures this deficiency of the Hays Ground.

Second, 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, ¶¶185-186. Like Hays, this “ad targeting” is not based on one of the claimed factors. Ex. 2004, ¶186. 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, ¶¶185-186.

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, ¶185. 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 pre-select a message, as the claim requires. Ex. 2004, ¶186.

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, ¶185. Moreover, a POSITA would have understood that “ad targeting” is distinct from the factors above. Ex. 2004, ¶186. 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, ¶186. In contrast, the claim requires a checking step based on the device type, service provider, and similar characteristics that determine compatibility between the content and the user’s device. Ex. 2004, ¶186.

Further, these claims require the opposite of Choi, by reciting using carrier information, not demographic information, to perform the claimed “checking” step. Ex. 2004, ¶186. Choi does not describe how any carrier information could be used to determine what advertisement to send. Ex. 2004, ¶186.

Dr. Zagal’s “testimony” does nothing to bolster these deficiencies. His opinions in paragraphs 148-151 of his declaration are nearly a word-for-word copy of page 37-38 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, ¶140; Ex. 2004, ¶186. As Dr. Akl explains, however, a POSITA would not have been motivated to use Choi to determine a particular advertisement. Ex. 2004, ¶186. 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, ¶186. Indeed, Hays assigns a weight to an advertisement based on the advertisement itself. Ex. 2004, ¶186. Hays does not perform any steps to check for technical compatibility of the advertisement with the factors recited in these claims.

Thus, the combination of Hays and Choi fails to render claim 1 or 9 obvious.

2. Claims 9-16: The Petition Does Not Cure the Deficiencies of Hays Addressed Above.

Just as in Ground 1, the Petition does not bolster any of the analysis of claim 9 and its dependent claims, 10-16. Rather, the analysis in the Hays Ground suffers from the exact same deficiencies discussed above with respect to Ground 1. *See* Ex. 2004, ¶187. Thus, the Hays-Choi combination fails with respect to these claims for this additional reason.

3. Claims 4 and 12: The Hays-Choi Combination Does Not Disclose “identifying what in-game video game content to send is based on” the claimed factors.

The Petition does not bolster any of its analysis of Hays with the inclusion of Choi. Ex. 2004, ¶¶188-189. To the contrary, the Petition simply states: “Choi also discloses selecting advertisements and messages based on the GPS location of a mobile device.” Petition at 39. First, the Petition does not actually cite to Choi for this. *See id.* Second, even if Choi discloses GPS location, it does so in the context of an Ad Manager on the mobile device, which “can use GPS location information to

request location-specific advertising content from the network server.” Ex. 1006, [0043]. But the claim requires that the identifying step is performed by the server. This is not disclosed by Choi’s local device making a request for specific advertising based on GPS location information. Ex. 2004, ¶¶190-191.

4. 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, ¶¶192-198. 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, ¶194. As noted above, this is not the same as the checking step discussed above. *See* Ex. 2004, ¶194.

To address this deficiency, the Petition relies on Choi, which discloses an entirely different system for determining what advertisement to send. Choi discloses “ad targeting” which “depends on collection of user demographic and contextual information.” Ex. 1006, [0083]; Ex. 2004, ¶195. 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, ¶195.

Moreover, as Dr. Akl confirms, a POSITA would have not been motivated to combine Hays and Choi. Ex. 2004, ¶¶196-198. Hays provides a method for sending advertisements regardless of the specific game in which it may be used. Ex. 2004, ¶197. Yet, Choi is directed to sending advertisements in “pre-existing mobile applications.” Ex. 2004, ¶197; 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, ¶197.

Dr. Zagal's “testimony” fails to cure these deficiencies. His alleged motivation to combine in paragraphs 137-147 of his declaration is nearly a word-for-word copy of the analysis in the Petition, which should carry little weight. *Compare* Ex. 1003, ¶¶137-147 with Petition at 32-36; *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, ¶¶196-198. 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 Claims 5 and 14 Obvious.

Petitioner alleges that claims 5 and 13 are obvious in view of Hays (or Hays and Choi) in combination with Chu, but the proposed combination fails to teach or suggest the claimed “the server is further configured to send information to the mobile communication device regarding the in-game placement location of the in-game 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 “the server is further configured to send information to the mobile communication device regarding the in-game placement location of the in-game 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 sending an in-game placement location and neither Choi nor Chu cures this deficiency. Ex. 2004, ¶¶199-201.

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 43 (quoting Ex. 1007, 14:20-15:5). The Petition also asserts that Chu discloses sending the location information from the server to the client, but this disclosure is entirely absent from Chu. Petition

at 43. 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, ¶¶199-201, 106.

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, ¶¶199-201, 105-106.

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 43 with Ex. 1003, at ¶¶167-169; *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, ¶¶199-201, 105-106.

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 claims 5 and 13 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, ¶¶202, 108-114.

In Hays advertisements get attached to ad units that are built into the game, and these ad units have positions within the game, therefore ads are automatically

positioned at the ad unit. Thus, there is no motivation to combine Hays with Chu for the purpose of providing yet another mechanism for positioning advertisements. 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, ¶¶202, 111 Hays teaches against designing a game (or advertisement therein) in such a narrow nature. Ex. 2004, ¶¶202, 111. 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 advertisements are sent to ad units "regardless of [their] location." Ex. 2004, ¶¶202, 110-111.

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, ¶209; *see* Ex. 2004, ¶¶202, 112. But, in doing so, he ignores the purpose of Hays. Ex. 2004, ¶¶202, 112. As Dr. Akl explains, Hays provides advertisements regardless of the location and attaches them to one or more ad units in games. Ex. 2004, ¶¶202, 112. 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, ¶¶202, 112. A POSITA would not have been motivated to control the location of advertisements in Hays’s system which expressly provides that advertisements are placed in ad units “regardless of [their] location.” Ex. 2004, ¶¶202, 110, 112.

Further, Hays teaches the server sending advertisements to be displayed at ad units. Ex. 2004, ¶¶202, 113. In contrast, Chu describes requests from the client, not from the server. Ex. 2004, ¶¶202, 113. 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, ¶¶202, 113. Thus, contrary to Dr. Zagal’s assertion that “[a] POSITA would have reasonably expected the proposed Hays and Chu combination to succeed,” (Ex. 1003, ¶166), a POSITA would not have reasonably expected a combination of Hays’s push system with Chu’s pull system to succeed. Ex. 2004, ¶¶202, 113.

VI. GROUNDS 4-6: NONE OF THE LEVKOVITZ GROUNDS RENDERS THE CHALLENGED CLAIMS OBVIOUS.

A. Ground 4: Levkovitz Does Not Render Claims 1-16 Obvious.

1. Claims 1[e] and 9[d]: Levkovitz does not disclose “wherein the message is *pre-selected* by the server....”

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 any message is “pre-selected,” as is required by the claim.

With respect to “pre-selected,” the Petition’s only analysis with respect to Levkovitz is “[b]ecause the advertisements are selected based on a type of mobile communication device, the presentation rules (i.e. messages related to content) are also pre-selected based on a type of mobile communication device.” Petition at 48.

This conclusory statement never addresses how a “presentation rule” is pre-selected. And the cited paragraphs of Levkovitz, [0129] and [0142], do not suggest that any capping rule is “pre-selected.” Rather, paragraph [0129] describes “presentation rules” that simply control the display of content, e.g., “cap the number of times that a certain content item may be presented, e.g., within a certain time period; a capping rule to cap the number of times that a certain type of content items (e.g., animated content items, large-sized content items, audio content items) may be presented within a certain time period.” Ex. 1008, [0129]. But there is no disclosure of this rule being “pre-selected.” Rather this presentation rule is simply a rule that is transmitted along with the content, without any suggestion of pre-selection. Ex. 2004, ¶¶203-205.

Levkovitz paragraph [0142] does not bolster this disclosure. Rather, this paragraph discusses that “Control server 120 may selectively obtain from database 140 content items which are ready for serving in accordance with pre-defined rules.”

Ex. 1008, [0142]. This paragraph does not suggest that these rules are “pre-selected,” but rather that they are “pre-defined.” But a rule being defined does not suggest it was selected, much less “pre-selected,” and these rules are part of the selection criteria not a message sent to the mobile device. Ex. 2004, ¶¶204-205. Further, the rule is transmitted from database 140 to control server 120. It is not transmitted to a mobile device, as is required by the claim. Ex. 2004, ¶¶204-205. Indeed, Levkovitz is explicit that these rules apply to the server rather than the mobile devices. *See* Ex. 1008, [0142] (“control server 120 may instruct a first ad server 110 to serve a first version of the content item not more than 400 times within the next 24 hours.”).

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

As with the grounds discussed above, Petitioner relies on Dr. Zagal, but as he did with the other elements, Dr. Zagal simply parrots the Petition, offering nothing to its flawed analysis. *Compare* Petition at 47-49 (addressing element 1(a)) *with* Ex. 1003, ¶¶184-187; *Xerox*, IPR2022-00624, Paper 9, at 18 (PTAB Aug. 24, 2022).

3. Claims 9-16: Levkovitz does not disclose “pre-selected in-game video game content” as required by claim 9.

The Petition does not address the additional pre-selected requirements of claims 9-16 at all. To the contrary, the Petition simply refers back to claim 1, which does not recite this element, and the analysis in the Petition does not address “*pre-selected* in-game video game content” anywhere with respect to Levkovitz. *See*

Petition at 54; Ex. 2004, ¶¶218-220. Indeed, the phrase “*pre-selected* in-game video game content” never appears in the body of the Petition, and instead only appears in the heading on page 30. Dr. Zagal does not bolster this analysis as “*pre-selected* in-game video game content” also never appears in the body of his declaration.

Thus, the Petition fails to carry its burden with respect to claim 9 and all of its dependent claims, which are patentable over Levkovitz.

4. Claims 9-16: Levkovitz does not disclose “in-game video game content *for use in a video game*” as required by claim 9.

Claim 9 further requires that the “in-game video game content” is “for use in a video game” *See* claim 9[a]. As with the elements of claim 9 discussed above, the Petition does not address “video game content for use in a video game” at all. The Petition addresses only claim 1 without separately addressing claim 9. *See* Petition at 54; Ex. 2004, ¶221.

Indeed, at most, the Petition states in passing, with respect to Limitation 1[a], “These ‘content items’ are ‘directed for presentation using a first application 176 (e.g., a chess game),’ and are therefore for use in a video game.” Petition at 44 (citing Ex. 1008, [0127]). This does not actually address the element of claim 9, but even if it did, it would fail.

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 content (or advertisements) are “for use in a video game.” Ex. 2004, ¶¶222, 122-131.

Instead, as the Petition concedes, Levkovitz merely discloses “serv[ing] content items directed for presentation....” Petition at 12 (quoting Ex. 1008, [0127]); *see also* Ex. 1008 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, ¶¶222, 123-124. Petitioner contends that content is ““directed for presentation using a first application 176 (e.g., a chess game),’ and [is] therefore *for use in a video game*.” Petition at 44 (quoting Ex. 1008, [0127]). This does not describe that the content is actually “for use” in the video game. Ex. 2004, ¶¶222, 124. Rather, at most it describes that the content is displayed within the video game. Ex. 2004, ¶¶222, 124. Display in a video game does not disclose that content is used, i.e., part of the functionality of that video game. Ex. 2004, ¶¶222, 124.

Further, Levkovitz’s disclosure is fully consistent with the prior art discussed during prosecution of the Parent Patent, which the applicant overcame. Ex. 2004,

¶¶222, 125-128. 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. 2002 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, which is similar to Levkovitz’s description of banner ads, which are nothing more than links to advertising materials that are not used in the game.

Again, this is consistent with the understanding of a POSITA at the time of invention. Ex. 2004, ¶¶222, 128-129. As Dr. Akl explains, a POSITA would have found the hyperlinks analogous to ads served via WAP protocol. Ex. 2004, ¶¶222, 128-129. Ads served by browser-based or WAP-based methods are distinct from a gaming application already downloaded on the mobile device. Ex. 2004, ¶¶222, 129.

Dr. Zagal does not support the Petition. He never addresses claim 9 in substance, and his only statement regarding “for use” is to quote the sentence from

page 44 of the Petition *verbatim*. See Ex. 1003, ¶175 (“For example, Levkovitz teaches that these ‘content items’ are ‘directed for presentation using a first application 176 (e.g., a chess game),’ and are therefore for use in a video game.”). This conclusory quoting of the Petition should be afforded no weight. See *Xerox Corp.*, IPR2022-00624, Paper 9, at 18.

5. Claims 5 and 13: Levkovitz does not disclose that “send[ing] information [from the server] to the mobile communication device regarding the in-game placement location of the in-game video game content.”

With respect to this additional claim element the Petition points to Levkovitz discussing the size of an item to be displayed. See Petition at 51-52. In particular, the Petition points to “full-size content,” “half-screen size content,” and “a quarter-screen size content.” Petition at 51. The Petition never states that this discloses a placement location. Rather, the Petition merely states, in conclusory fashion, that “A POSITA would have understood and it would have been obvious that Levkovitz’s server sends information to the mobile communication device regarding the size of the ad and its in-game location.” But items can be transmitted with a display size, but no placement location. Ex. 2004, ¶¶207-208, 224. The Petition never attempts to explain why there must necessarily be a placement location. See Petition at 52. Further, Dr. Zagal does not bolster the Petition, instead, simply parroting the exact same conclusion without any further analysis or explanation. Ex. 1003, ¶198.

6. Claims 7 and 15: Levkovitz does not disclose that the “server is further configured to track the distribution of updated content.”

Claims 7 and 15 each require that “the server tracks the distribution of updated content.” Petitioner asserts that Levkovitz teaches this limitation because first due to the operations of control server 120. Petition at 53 (citing Ex. 1008, [0143]). But Levkovitz is explicit that control server 120 “monitor[s] and track[s] the distribution of content items *among multiple ad servers 110*,” and thus does not track distribution of the updated content to the recipient mobile devices. Ex. 1008, [0143]; Ex. 2004, ¶¶210, 225, 135.

The Petition next cites to Levkovitz paragraph [0154], but again this paragraph does not describe tracking “distribution,” i.e., what has been uploaded. Rather, this describes “a log tracking the activity or servings done by ad server 110,” which at most discusses tracking what content has been presented or what presentations have been performed. Ex. 2004, ¶¶210, 135. The Petition goes on to cite to paragraph [0171], which describes exactly the same thing, i.e., a log that tracks the “number of servings of content items (e.g., every 100 impressions, every 500 impressions, etc.).” Ex. 1008, [0171]. As before, this does not track what has been uploaded, but rather what has been viewed. Ex. 2004, ¶¶210, 135.

Further, content (or advertisements) could be uploaded and not presented, and *vice versa*, content could be presented but not uploaded. Ex. 2004, ¶¶210, 136. This

is particularly true because Levkovitz uses WAP protocols, as shown in its figures. *See, e.g.*, Ex. 1008, Fig. 7; Ex. 2004, ¶¶210, 136. With WAP protocols, a POSITA would know that data is not uploaded to the mobile device. Ex. 2004, ¶¶210, 136. Instead, WAP operates like a web browser that retrieves and caches content but does not require downloading or uploading. Ex. 2004, ¶¶210, 136. As Dr. Akl explains, a POSITA would understand that Levkovitz teaches presenting advertisements, but not uploading, through the WAP-based protocol described. Ex. 2004, ¶¶210, 136.

Instead, a POSITA would understand that Levkovitz teaches away from uploading content. Ex. 2004, ¶¶210, 137. 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, ¶¶210, 137. A POSITA would understand that Levkovitz consumes less resources by not uploading (or downloading) content. *See* Ex. 2004, ¶¶210, 137. Thus, because Levkovitz’s WAP-based ad server does not disclose uploading content, it similarly does not disclose “the server tracks the distribution of updated content,” as required by claims 7 and 15.

7. Claims 8 and 16: Levkovitz does not disclose that “the server is further configured to check for availability of

bandwidth before sending the updated content to the mobile communication device.”

With respect to “check[ing] for availability of bandwidth before sending the updated content to the mobile communication device,” the Petition completely ignores that this claim requires a specific step to “check for availability of bandwidth.” Instead, the Petition simply states, in conclusory fashion, that Levkovitz’s discussion of receiving “functional capabilities of device 170” would necessarily “would include information about the availability of bandwidth, i.e., the connection between the device and the server.” Petition at 53. The Petition offers no further explanation, nor could it, as functional capabilities of a device does not disclose or suggest “check[ing] for availability of bandwidth before sending the updated content to the mobile communication device,” as is required. *See* Ex. 2004, ¶¶211-217, 226. Further, Dr. Zagal does not bolster the Petition, instead, simply parroting the exact same conclusion without any further analysis or explanation. Ex. 1003, ¶204.

B. Ground 5: The Combination of Levkovitz and Chu Does Not Render Claims 5 and 13 Obvious.

Petitioner asserts claim 5 and 13 is rendered obvious by Levkovitz in view of Chu. Chu, however, fails to disclose that “the server is further configured to send information to the mobile communication device regarding the in-game placement

location of the in-game video game content.” Further, Petitioner failed to show a motivation to combine Levkovitz and Chu.

1. Levkovitz and Chu do not disclose “the server is further configured to send information to the mobile communication device regarding the in-game placement location of the in-game video game content.”

As discussed, Levkovitz does not disclose this claim element and thus the Petition attempts to cure the deficiency with Chu. 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 56-57 (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 5 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 cause a server to “send information to the mobile communication device regarding the in-game placement location of the in-game video game content,” rather than for the mobile device to send information to the server. Ex. 2004, ¶¶227-228, 143-144. In fact, it would not have been obvious to do so as described further below. Ex. 2004, ¶¶227-228, 143-144.

Thus, the combination of Levkovitz and Chu fails to render claims 5 and 13 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 55. 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.’” *Id.* (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, ¶¶229, 146-151. 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, ¶¶229, 149.

Chu’s teaching is opposite from Levkovitz’s teaching of delivering targeted advertisements. Ex. 2004, ¶¶229, 149-150. 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, ¶¶229, 149-150. A POSITA would, thus, have not been motivated to combine these two systems as they operate in opposite manners. Ex. 2004, ¶¶229, 149-150.

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 54-56 *with* Ex. 1003, at ¶¶206-211; *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, ¶¶229, 146-151. Indeed, as Dr. Akl explains, Levkovitz seeks to serve advertisements broadly, like an ad banner. Ex. 2004, ¶¶229, 151. 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, ¶¶229, 151 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 6: The Combination of Levkovitz and Choi Does Not Render Claims 8 and 16 Obvious.

Petitioner asserts claims 8 and 16 are rendered obvious by Levkovitz in view of Choi. As discussed above, Levkovitz fails to disclose many elements of claims 1 and 9, and the Petition does not establish that Choi cures any of these deficiencies. Rather, the Petition focuses on Choi's discussion of checking bandwidth, but never establishes that Choi would cure any other deficiency. Choi does not and cannot cure any other deficiency of claims 1 and 9, and thus claims 8 and 16, which depend from and further limit claims 1 and 9 are patentable for at least the same reasons.

VII. 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, ¶¶231-238. There thus was a long-felt need for the invention of the '056 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 content associated with a mobile video game to a mobile communication device.”

Indeed, at the time of the invention of the '056 Patent, the mobile game landscape was very different. Ex. 2004, ¶233. Modern App stores were not available, and each wireless carrier had to manage their own offering of mobile games. Ex. 2004, ¶¶232-233. Further, game engines, or the software architecture necessary to develop games (like the invention of the '056 Patent) was not yet developed, which led to a short lifecycle for games. Ex. 2004, ¶¶232-233.

Game development in other contexts (e.g., console games) did not face the same issues. Ex. 2004, ¶233. 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, ¶233. 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, ¶233. This was not practical to do on a mobile device with great size and storage limitations. Ex. 2004, ¶233. The '056 Patent was revolutionary in its time and solved this problem by sending updated content without requiring that the game be downloaded anew and in its entirety. Ex. 2004, ¶¶39-51.

The documents cited as background in the Petition also show that there was a long-felt need for the invention of the '056 Patent. Ex. 2004, ¶¶231-238. 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” (Ex. 1015 at 1)—confirming that, as of its June 26, 2007 priority date, the invention was novel and absent from the current art. *Id.*; *see* Ex. 2004, ¶237. Additional documents identified by Playrix suggest the novelty and long-felt need of the inventions because they explain that “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, ¶235; *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. Ex. 1018; *see* Ex. 2004, ¶234. 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, ¶237. Further, this article confirms exactly the need to address the problem that the '056 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, ¶237. This evidence of long-felt need also confirms that the claims of the '056 Patent are not obvious.

The prior art also taught away from the claimed invention of the '056 Patent. In particular, the prior art taught away from providing updated game content to a mobile communication device for use in a mobile video game. At the time of the invention of the '056 Patent, programmers could not update content in a game on a mobile device without re-downloading an entire application. Ex. 2004, ¶233. 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 '056 Patent. Ex. 2004, ¶¶47-51, 232-233.

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, ¶49. A developer seeking to update 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, ¶¶48-50. These prior art methods taught away from using the application-based invention of the '056 Patent (*see* Ex. 2004, ¶233), and this evidence also confirms that the inventions are not obvious.

VIII. 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 to references that are themselves a “publication” as of the ’056 Patent’s priority date of June 26, 2007. *See supra* Section III.

Hays was filed on March 8, 2005, but did not publish until May 1, 2008. 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. 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 ’056 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). 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 fails to contend that either Hays or Choi was publicly accessible prior to the '056 Patent's priority date of June 26, 2007. 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).

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.⁵ Accordingly, each of Grounds 1–3 and 6 fails because it relies on the ineligible Hays and/or Choi references. *See* Petition at 2.

IX. CONCLUSION

For at least the reasons set forth above, the Petition fails to shoulder its burden of establishing that any of Claims 1-16 of the '056 Patent are unpatentable.

⁵ 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).

Dated: August 2, 2024

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CERTIFICATE OF WORD COUNT

Pursuant to 37 C.F.R. § 42.24(d), the undersigned certifies that this Preliminary Response contains 13,952 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).

Dated: August 2, 2024

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CERTIFICATE OF SERVICE

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