

IN THE 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.

Case No. IPR2024-00200

U.S. Patent No. 11,117,056

**PETITION FOR *INTER PARTES* REVIEW
OF U.S. PATENT NO. 11,117,056**

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1006	U.S. Patent Pub. No. 2007/0174490 (“Choi”)
1007	U.S. Patent No. 7,698,178 (“Chu”)
1008	U.S. Patent Pub. No. 2007/0088801 (“Levkovitz”)
1009	Exemplary infringement charts for U.S. Patent No. 11,117,056 served by Patent Owner in <i>Flip Phone Games Inc. v. PLR Worldwide Sales Ltd.</i> , No. 2:23-cv-139 (E.D. Tex.)
1010	Steven Kent, <i>The Ultimate History of Video Games</i> (2001)
1011	Frans Mayra, “Mobile Games,” in the <i>International Encyclopedia of Digital Communications and Society</i> , 1st ed. (2015)
1012	N. Leavitt, “Will wireless gaming be a winner?” in <i>Computer</i> , Vol. 36, No. 1, pp. 24-27 (Jan. 2003)
1013	Jason Soh & Bernard Tan, “Mobile Gaming,” in <i>Communications of the ACM</i> , Vol. 51, No. 3, pp. 35-39 (Mar. 2008)
1014	Michael Zyda et al., “Educating the Next Generation of Mobile Game Developers,” in <i>IEEE Computer Graphics and Applications</i> , Vol. 27, No. 2, pp. 92-96 (Mar./Apr. 2007)
1015	Mark Andrejevic, “Productive Play 2.0: The Logic of In-Game Advertising” in <i>Media International Australia</i> , Vol. 130, No. 1, pp. 66-76 (Feb. 2009)

1016	Ilya Vedrashko, Advertising in Computer Games (Doc. No. 123290221) [Master's Thesis, Mass. Inst. of Technology], DSpace@MIT
1017	Exit Games, In-Game Advertising Goes Mobile [Press Release] (Mar. 21, 2006)
1018	Jussi-Pekka Partanen, Mobile Gaming: A Framework for Evaluating the Industry 2000-2005 (2001)

LIST OF CHALLENGED CLAIMS

Claim	Limitation
1[pre]	A system for providing updated content associated with a mobile video game to a mobile communication device, the system comprising:
1[a]	a storage medium for storing in-game video game content;
1[b]	a server in communication with the storage medium; and
1[c]	wherein the server is configured to: receive a request for updated content from the mobile communication device;
1[d]	identify, in response to receiving the request, what in-game video game content to send;
1[e]	send 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 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; and
1[f]	send the in-game video game content to the mobile communication device as the updated content for the mobile video game.
2	The system of claim 1, wherein the updated content comprises promotional content.
3	The system of claim 2, wherein the promotional content comprises localized promotional content based on a location of the mobile communication device.

Claim	Limitation
4	The system of claim 1, wherein identifying what in-game video game content to send is based on a model type associated with the mobile communication device, a service subscription associated with the mobile communications device, a service provider for the service subscription associated with the mobile communication device, or a location of the mobile communications device.
5	The system of claim 1, wherein 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.
6	The system of claim 1, wherein the server is further configured to check whether the mobile communication device should receive the updated content before sending the updated content to the mobile communication device.
7	The system of claim 1, wherein the server is further configured to track the distribution of updated content.
8	The system of claim 1, wherein the server is further configured to check for availability of bandwidth before sending the updated content to the mobile communication device.
9[pre]	A method for providing updated content associated with a mobile video game to a mobile communication device, the method comprising:

Claim	Limitation
9[a]	storing, on a storage medium, pre-selected in-game video game content for use in a video game;
9[b]	receiving, at a server, a request from the mobile communication device for updated content from the mobile communication device;
9[c]	identifying, by the server in response to receiving the request, what pre-selected in-game video game content to send;
9[d]	sending a message relating to the in-game video game content from the server to the mobile communication device in response to receiving the request, wherein the message is pre-selected by the server based on 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; and
9[e]	sending, from the server, the pre-selected in-game video game content to the mobile communication device as the updated content for the mobile video game.
10	The method of claim 9, wherein the updated content is promotional content.
11	The method of claim 10, wherein the promotional content is localized promotional content based on a location of the mobile communication device
12	The method of claim 9, wherein identifying what in-game video game content to send is based on a model type associated with the mobile communication device, a service subscription associated with the mobile communications device, a service

Claim	Limitation
	provider for the service subscription associated with the mobile communication device, or a location of the mobile communications device.
13	The method of claim 9, further comprising sending information from the server to the mobile communication device regarding the in-game placement location of in-game video game content.
14	The method of claim 9, further comprising checking whether the mobile communication device should receive the updated content before sending the updated content to the mobile communication device.
15	The method of claim 9, further comprising tracking the distribution of updated content at the server.
16	The method of claim 9, wherein the server checks for availability of bandwidth before sending the updated content to the mobile communication device.

I. INTRODUCTION

PLR Worldwide Sales Limited (“Petitioner”) respectfully requests *inter partes review* of claims 1-16 (the “Challenged Claims”) of U.S. Patent No.

11,117,056 (the “’056 patent”) pursuant to 35 U.S.C. §311 and 37 C.F.R. §42.100.

The ’056 patent, which has a priority date of June 26, 2007, claims a system and method for providing content updates to be displayed in a mobile game based on factors such as the type of mobile device or the mobile device’s carrier. The simplicity of this description, which is reflected in the plain language of the claims, underscores the obviousness of the challenged claims as of 2007. Petitioner presents two references, Hays and Levkovitz, both of which alone disclose or render obvious every limitation of independent claims 1 and 9, and most or all of the dependent claims.

For example, Hays describes a system for presenting updated content such as advertisements within a game played on a game console, which includes mobile devices such as cellular phones. The game console requests an advertisement, and the system selects an advertisement based on numerous factors, including the type of mobile device and the demographics of the user. The advertisement is then displayed within the game, such as on a store front or on a car within the game.

Levkovitz similarly describes presenting updated content such as advertisements for game applications running on a mobile device. The mobile

device may request an advertisement from the ad server, which selects an advertisement based on the type of mobile device and the demographics of the user. The advertisement is then displayed within the application.

II. STANDING

Petitioner certifies that the '056 patent is available for IPR and that Petitioner is not barred or estopped from presenting the grounds identified in this Petition.

III. IDENTIFICATION OF CHALLENGE AND RELIEF REQUESTED

Petitioner requests cancellation of claims 1–16 (“Challenged Claims”) on the following grounds:

Ground	Reference(s)	Basis	Claims
1	Hays	§103	1-16
2	Hays, Choi	§103	1-16
3	Hays (or Hays/Choi), Chu	§103	5, 13
4	Levkovitz	§103	1-16
5	Levkovitz, Chu	§103	5, 13
6	Levkovitz, Choi	§103	8, 16

IV. LEVEL OF ORDINARY SKILL IN THE ART

A person of ordinary skill in the art (“POSITA”) as of June 26, 2007 would have had 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. Ex. 1003, ¶¶65-69. Less work experience may be compensated by a

higher level of education or vice versa. *Id.* Petitioner’s expert, Dr. José Zagal, exceeds this definition. *Id.*, ¶70.

V. THE ’056 PATENT

A. Overview

U.S. Pat. No. 11,117,056 (the “’056 patent”) is directed to “updating content of a mobile video game [that] allow for mobile communication devices to receive updated content for video games that operate on the devices.” Ex. 1001, Abstract. These “updates may be promotional in nature,” *i.e.* advertisements. *Id.* The ’056 patent explains that “[a]fter server 120 receives a communication request from mobile communication device 110, server 120 may check whether updated content is available for one or more mobile video games.” *Id.*, 5:58-61. The server determines “whether updated content should be sent to the particular mobile communication device 110,” and “user information may also be utilized to determine which updated content to download, such as the sex, age, or interests of the user.” *Id.*, 5:65-6:7. In addition to updated content, the server may also send the mobile communication device a “message relating to the content,” such as a “message alert[ing] the user of available updated content” or a message that “helps the mobile communication device internally check what available updated content is already present on the mobile communication device.” Ex. 1001, 3:39-41, 9:53-10:21.

When the “updated content has been downloaded by the mobile communication device 110, the content may be placed in-game (i.e., within the video game environment).” Ex. 1001, 6:13-15.

B. Prosecution History of the ’056 Patent

The ’056 patent was filed on April 9, 2020 as Application No. 16/844,256. Ex. 1001.

During prosecution of the ’056 patent, the examiner rejected most of the original claims as anticipated or obvious based on U.S. Patent Publication No. 2008/0307412 (“Marr”), alone or in combination with U.S. Patent Publication No. 2006/0136297 (“Willis”), but noted that two dependent claims (reciting that the server pre-selects a message “based on a model type ..., a service subscription ..., or a service provider ... associated with the mobile device”) would be allowable if incorporated into the independent claims. Ex. 1002, 96-101. The examiner also raised a non-statutory double patenting rejection. *Id.*, 101-102. In response, applicant filed a terminal disclaimer and amended the independent claims to incorporate the aforementioned limitation. *Id.*, 56-57, 75-80. The claims as amended were then allowed. *Id.*, 34-37.

Both of Petitioner’s primary references, Hays and Levkovitz, disclose a server pre-selecting a message based on the type of the mobile communication device. Ex. 1003, ¶63. Neither reference was cited or considered by the examiner.

VI. TECHNOLOGY BACKGROUND

A. Video Games

The history of video games spans decades. For example, in 1961, students at MIT programmed an early, very expensive, very large computer to play a game they titled “Spacewar,” which simulated duels between rocket ships in space. Ex. 1003, ¶43; Ex. 1010 at 34-35. Video games rose in popularity and entered the mainstream in the 1970s and 1980s, particularly with the development and release of coin-operated arcade machines and home video game consoles, such as the Magnavox Odyssey, the Atari Video Computer System, the Nintendo Entertainment System, and the Sega Master System. Ex. 1003, ¶44; Ex. 1010 at 42, 124, 140-166, 295, 320. By the end of the 1980s, video games were already a multi-billion dollar business. Ex. 1003, ¶44; Ex. 1010 at 429.

B. Mobile Games

Portable video game systems began to launch at roughly the same time as home video game consoles. For example, in the late 1970s, Nintendo released its “Game & Watch” series of watch-shaped portable video games. Ex. 1003, ¶45; Ex. 1010 at 296; Ex. 1011 at 2. Ten years later, in 1989, Nintendo released the Game Boy, one of the first handheld video game systems that supported multiple games by way of interchangeable cartridges. Ex. 1003, ¶45; Ex. 1010 at 430; Ex. 1011 at 2.

Video games began appearing on mobile phones in the late 1990s. For example, in 1997 Nokia began pre-installing a mobile version of the game *Snake* on

its mobile handsets. Ex. 1003, ¶46; Ex. 1011 at 2; Ex. 1012 at 2. As mobile phones incorporated increasingly more powerful hardware, demand for mobile games increased and more mobile game developers emerged to meet that demand. Ex. 1003, ¶46; Ex. 1012 at 2; Ex. 1013 at 2. Following that trend, in 2003, handset manufacturer Nokia released a portable gaming device built on a mobile phone, called the N-Gage. Ex. 1003, ¶46; Ex. 1013 at 4. Market analysts in the early 2000s considered mobile games to be one of the fastest growing segments in the video game industry, and established video game publishers invested hundreds of millions of dollars to acquire a presence in that market. Ex. 1003, ¶47; Ex. 1014 at 1. Indeed, as the '056 Patent acknowledges, by its priority date “[m]any mobile communication devices ... [were] capable of operating video games,” and “gaming on mobile communication devices [had] become a popular mode of entertainment.” Ex. 1001, 1:19-22, 1:31-34.

Although mobile game development posed some unique challenges, hardware manufacturers and software developers quickly adapted to meet these challenges. Ex. 1003, ¶¶47-48. For example, Intel and NVIDIA developed hardware and software specifically designed to support 3D graphics on mobile phones; handset manufacturers such as Ericsson and Motorola defined software interfaces to support standard functions used in video games; and platform developers such as Oracle and

Qualcomm released software development platforms to facilitate programming of mobile games. Ex. 1003, ¶48; Ex. 1012 at 3; Ex. 1013 at 2-3; Ex. 1014 at 1.

C. Dynamic Content and In-Game Ads

Game developers embraced the idea of updateable games even before mobile games became popular. Ex. 1003, ¶51. Many game publishers released expansion packs for popular games that added new levels or new in-game characters or items to keep players interested. *Id.* For example, in 2001, Nokia launched a subscription service that allowed members to download new levels for certain mobile games. *Id.*; Ex. 1018 at 52.

Dynamic content updates also allowed advertisers to expand into video games. Ex. 1003, ¶52. By 2006, a number of different advertising companies offered in-game advertising networks that allowed game developers to incorporate dynamic ads from third parties into their games, including mobile games. *Id.*; Ex. 1015 at 1-2; Ex. 1016 at 22-23; Ex. 1017 at 1. Many of these in-game ads took the form of billboards and similar passive advertisements within the game world; however, interactive ads were also incorporated into games, requiring the user to interact with an in-game object in order to trigger advertising content to appear. Ex. 1013, ¶52; Ex. 1016 at 45. At least some of the grounds presented in this petition rely on prior art references originating at several of the in-game advertisement network companies from that era. Ex. 1003, ¶53; *see also, e.g.*, Ex. 1006; Ex. 1007.

VII. OVERVIEW OF THE PRIOR ART

The below is an overview of the asserted prior art. All of the below references relate to provision and display of advertisements in a video game, and typically a video game running on a mobile communication device. Ex. 1003, ¶74. Thus, all of these references would be obvious sources that a POSITA would have considered when seeking to improve the provision of updated content to a mobile video game, as they all relate to the same field of endeavor, *i.e.*, systems and methods for delivering updated content, such as advertisements, to video games. *Id.*

A. Hays (Ex. 1005)

U.S. Patent Pub. No. 2008/0102947 (“Hays”) was filed on March 8, 2005 and is therefore prior art under pre-AIA §102(e).

Hays is directed to “[a]n advertisement delivery scheme and associated facility provide targeted advertisements for multiple video games without advertisers having to specify specific game titles in which they would like their advertisements placed.” Ex. 1005, Abstract. In particular, Hays describes “[a]n advertisement delivery scheme and associated computerized facility” that “allow advertisers to deliver their campaign messages to specific audiences they wish to target across one or more multiple game titles played across multiple platforms (e.g., PC, console, mobile, etc.).” *Id.*, ¶17. This is done by the “game playing device ... request[ing] and receiv[ing] advertisements from the advertisement management

service system.” *Id.*, ¶51. The advertisement management service system selects which advertisements to deliver using “an advertising matching and weighting system,” which “calculate[s] [a] weight of each advertisement based on several factors including ... information regarding the specific client type.” *Id.*, ¶43.

When the video game receives the advertisement, they are “presented in the appropriate available ad units at the appropriate time during game play.” *Id.*, ¶21. For example, “a game character [that] may move around a screen holding a can of Pepsi and ask player if they would like a drink.” *Id.*, ¶79. The below annotated Figure 1A shows the relationship between Hays’s various systems:

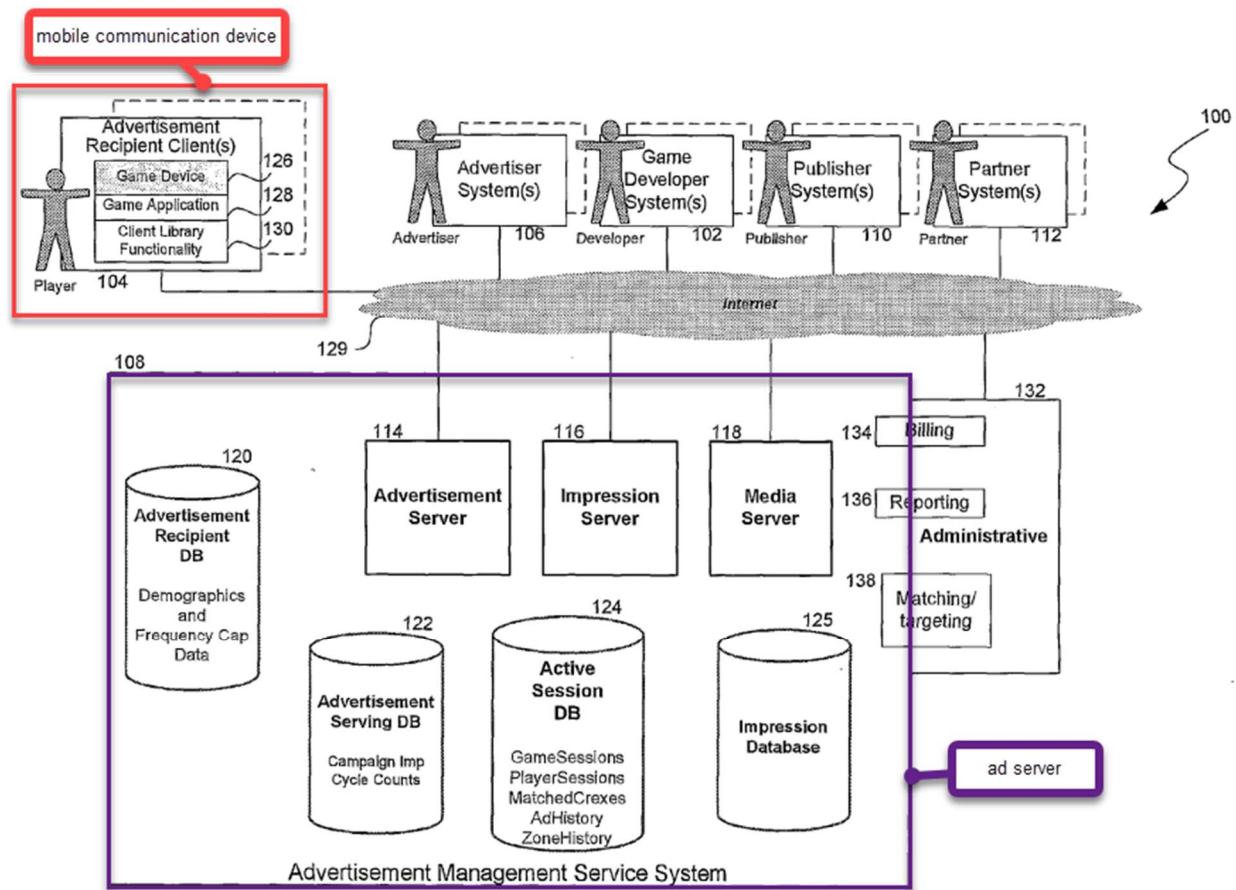


FIG. 1A

B. Choi (Ex. 1006)

U.S. Patent Pub. No. 2007/0174490 (“Choi”) was filed on January 19, 2007 and claims priority to several provisional applications filed in 2006. It is therefore prior art under pre-AIA §102(e).

Choi is directed to “[m]ethods and systems for managing distribution and retrieval of data (for example advertising content and viewing statistics) ... into pre-existing mobile applications” such as “portable game consoles.” Ex. 1006, Abstract, ¶3. In selecting advertisements to deliver to the mobile game, Choi describes using “demographic information from the carrier” of the mobile device as well as using “GPS location information to request location-specific advertising.” Ex. 1006, ¶¶84, 43. Choi obtains demographic information from the carrier by inference because “a users’ carrier implies a certain demographic.” *Id.*, ¶86, ¶96 (“[S]ome carriers have users that are older, younger, businesses, family, etc.”).

C. Chu (Ex. 1007)

U.S. Patent No. 7,698,178 (“Chu”) was filed on November 22, 2005 and published on April 20, 2006. It is therefore prior art under pre-AIA §102(a), (b) and (e).

Chu is directed to “an online game advertising system ... for enabling ... interactive advertisements ... that appear within an online video game.” Ex. 1007, Abstract. Chu discloses “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.” Ex. 1007, 14:20-15:5.

D. Levkovitz (Ex. 1008)

U.S. Patent Pub. No. 2007/0088801 (“Levkovitz”) was filed on May 4, 2006 and published on April 19, 2007. It is also claims priority to application No. 11/250,476, which was filed on October 17, 2005. It is therefore prior art under §102(a) and (e).

Levkovitz is directed to “contextual and/or noncontextual placement of content, e.g., advertisements or banners, within an application executed by a cellular phone, a mobile phone, or other wireless communication device.” Ex. 1008, ¶5. The application could be “games for mobile phones.” *Id.*, ¶6; *see also* ¶123 (“The application 176 may be ... a game”), ¶127 (“a first application 176 (e.g., a chess game)”, “a second application 176 (e.g. a racing game).”).

Advertisements are delivered by the mobile game “request[ing] content” from an “ad server” which will “selectively serve content items to the content client, based on parameters related to the mobile phone, e.g., manufacturer identifier, model identifier, available memory, presentation capabilities, or the like..” Ex. 1008, ¶6, *see also id.*, ¶126 (“[A]d server 110 may select one or more content items which

may be adequately presented by device 170 based on properties of device 170, e.g., handset model ...”). The “ad server” then “serve[s] content items directed for presentation using a first application 176 (e.g., a chess game).” *Id.*, ¶127. The “[d]evice 170 may present the content item(s),” such as “within application 176, during or together with the execution of application 176.” *Id.*, ¶131. For example, “the user may complete a level in the game, and the first advertisement may be presented.” *Id.*, ¶320.

VIII. CLAIM CONSTRUCTION

Petitioner does not believe any terms require construction to resolve the patentability disputes because the challenged claims are rendered unpatentable by the cited art under any reasonable interpretation of the claims. Petitioner’s application of the claims is also consistent with Patent Owner’s application thereof in its infringement contentions served in the related district court litigation, examples of which are attached hereto as Exhibit 1009.¹ Petitioner takes no position in this Petition as to whether the claims are indefinite, and no statements herein should be interpreted to mean that the terms are definite. Ex. 1003, ¶¶71-72.

¹ Patent Owner served infringement charts for seven accused products. Petitioner has included two representative examples in Exhibit 1009.

IX. DETAILED EXPLANATION OF INVALIDITY GROUNDS

The following grounds establish a reasonable likelihood that the Petitioner will prevail with respect to the Challenged Claims. Ex. 1003, ¶¶85-226.

A. Ground 1: Claims 1-16 are Rendered Obvious in View of Hays

1. Claim 1

- (a) **1[pre]: A system for providing updated content associated with a mobile video game to a mobile communication device, the system comprising:**

To the extent the preamble is limiting, Hays discloses a *system for providing updated content associated with a mobile video game to a mobile communication device*. Ex. 1003, ¶¶88-91. Hays describes “[a]n advertisement delivery scheme and associated computerized facility” that “allow advertisers to deliver their campaign messages [*i.e. updated content associated with a mobile video game*] to specific audiences they wish to target across one or more multiple game titles [*i.e. mobile video games*] played across multiple platforms (e.g., PC, console, mobile, etc.) [*i.e. mobile communication device*].” Ex. 1005, ¶17. Hays also discloses an “advertisement management service system 108” that “includes an advertisement server 114, an impression server 116, and *a media server 118 (which stores and serves specific media files containing advertisement display/audio information—e.g., image files, audio files, video files, executables, etc.—to the advertisement recipient client 104 upon request)*.” Ex. 1005, ¶28. “When *a game* is played at a player’s gaming device ... the client library functions associated with the game

application may pull *media data* [*i.e. updated content associated with a mobile video game*] from the advertisement server and pass them on to the game code, so that specific advertisements may be presented in the appropriate available ad units at the appropriate time during game play.” *Id.*, ¶21.

According to the ’056 patent, *updated content* includes advertisements. Ex. 1001, 6:46-52 (“[V]irtually any of these items may be changed by receiving *updated content* on the mobile communication device. For instance, ... [t]he poster 225 might *advertise an upcoming movie* for third party Y, and chalk board 220 may contain *a handwritten advertisement* for third party Z.”); Ex. 1003, ¶90.

With respect to gaming platforms, Hays further describes that they can include “hand-held devices, wearable computers, cellular or mobile phones, microprocessor-based or programmable consumer electronics, ... and the like,” all of which are examples of *mobile communication devices*. Ex. 1005, ¶51. Hays also discloses that the terms “game console” and “console” “as used generally herein [*i.e. the patent*], refers to any of the above devices.” *Id.*; Ex. 1003, ¶91.

(b) 1[a]: a storage medium for storing in-game video game content;

Hays discloses *a storage medium for storing in-game video game content*. Ex. 1003, ¶¶92-93. For example, Hays discloses an “advertisement management service system 108” that “includes an advertisement server 114, an impression server 116, and *a media server 118 (which stores and serves specific media files*

containing advertisement display/audio information—e.g., image files, audio files, video files, executables, etc.—to the advertisement recipient client 104 upon request).” Ex. 1005, ¶28; *see also* ¶¶20-21, FIG. 1A. Hays further discloses that its servers include “storage devices” such as “computer-readable media.” *Id.*, ¶¶52, 55, 98.

Hays discloses that advertisements stored on the media server are *in-game video game content* because “[w]hen a game is played at a player’s gaming device” (*i.e. a video game that already exists on the mobile communication device*), the advertisements (*i.e. updated video-game content*) 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.” (*i.e., in-game*) Ex. 1005, ¶21. An example includes the advertisement management service system sending “a game character [that] may move around a screen holding a can of Pepsi and ask player if they would like a drink.” *Id.*, ¶79.

(c) 1[b]: a server in communication with the storage medium; and

Hays discloses *a server in communication with the storage medium*. Ex. 1003, ¶94. For example, Hays discloses that its “advertisement *server*” includes “one or more database components [*i.e. storage medium*],” from which it “may pull media data,” thereby indicating that the server is in communication with the database. Ex. 1005, ¶¶20-21. Hays also discloses that “an advertisement server

114” is connected to “a media server 118 (which stores and serves specific media files containing advertisement display/audio information ...)” via an “Internet 129.”

Id., ¶28; Fig. 1A.

(d) 1[c]: wherein the server is configured to: receive a request for updated content from the mobile communication device;

Hays discloses *wherein the server is configured to: receive a request for updated content from the mobile communication device*. Ex. 1003, ¶¶95-97. For example, Hays discloses that “[t]he advertisement recipient client 104 may include a game playing device 126 (e.g., a console, computer, *portable game device*, ...)” which “may *request* and receive *advertisements [i.e. updated content]* from the advertisement management service system [*i.e. server*].” Ex. 1005, ¶32. As mentioned in 1[pre], the game playing device also includes “cellular or mobile phones.” *Id.*, ¶51; Ex. 1003, ¶96. Hays also discloses that a mobile communication device “may communicate with an advertising request handler 210 associated with *the advertisement server* 114,” which enables “the matching of advertisement campaigns to appropriate various video game titles.” Ex. 1005, ¶37; *see* FIG. 1A.

(e) 1[d]: identify, in response to receiving the request, what in-game video game content to send;

Hays discloses that the server is further configured to *identify, in response to receiving the request, what in-game video game content to send*. Ex. 1003, ¶¶98-100. Hays discloses that a mobile communication device “may communicate with

an advertising request handler 210 associated with *the advertisement server* 114,” which enables “the matching of advertisement campaigns to appropriate various video game titles.” Ex. 1005, ¶37; *see* FIGs. 1A and 2. Hays discloses that when the mobile communication device sends a request for advertisements (*i.e. in-game video game content*), the “request contains a data structure that includes a unique identifier to indicate the *client type* ... [which] can effectively be a SKU, which includes a *type of game console* ...” Ex. 1005, ¶40. The “advertising request handler 210” forward the request “to an advertising matching and weighting system,” which “calculate[s] [a] weight of each advertisement based on several factors including ... information regarding the specific *client type*.” *Id.*, ¶¶40, 43.

The “advertising matching and weighting system 220 then selects one or more advertisements from the weighted advertisement 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.” *Id.*, ¶43. Thus, Hays discloses that the *server is configured to identify, in response to receiving the request, what in-game video game content to send.* Ex. 1003, ¶100.

- (f) 1[e]: send 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 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; and

Hays discloses *that the server is configured to send 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 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.* Ex. 1003, ¶¶101-106. Note that according to the '056 patent, the “message relating to the content” need not be “displayed to the user.” Ex. 1001, 10:6-8.

With respect to the “message relating to the in-game video content,” Hays explains for instance that “the tail end of this process (e.g., actually delivering *the files and data that the advertisement recipient client 104 uses to display the advertisement [i.e., the message]*) may be handled by a media server” and that “delivery of the content for advertisements may be separated from the metadata [*i.e., the message*] concerning the advertisement.” Ex. 1005, ¶41. The metadata is a *message relating to the in-game video game content.* Ex. 1003, ¶102. Hays also explains that data is “retrieved from a[n] advertisement recipient database 120 keyed upon the unique client identifier [*i.e., is pre-selected by the server based on a model type associated with the mobile communication device*].” Ex. 1005, ¶41; *see also* Ex. 1003, ¶106.

Hays discloses that “selected advertisements are then sent back to the ... advertisement recipient client for display.” Ex. 1005, ¶43. The advertisements themselves are also a *message relating to the in-game video game content* because they are sent as a message that contains the advertising content. Ex. 1003, ¶102.

Hays also discloses that the advertisements are “provid[ed]” as “*lists* of advertisements for specific available ad units.” Ex. 1005, ¶29; *see also* ¶40 (server “produces a *set* of one or more matched advertisements to be displayed for each available ad unit”). The “lists of advertisements” are a *message relating to the content* because the list is a data structure that specifies details about the available updated content, specifically which selected advertisements to display. *See, e.g.*, Ex. 1001, 9:67-10:3; Ex. 1003, ¶103.

Hays also discloses that in response to a request, the server “deliver[s] the files *and data* that the advertisement recipient client 104 uses to display the advertisement.” Ex. 1005, ¶41. Since the referenced “data” is used at the mobile communication device to “display the advertisement,” it is also a *message relating to the content*. Ex. 1003, ¶104.

Hays also discloses that the advertising server “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).” Ex. 1005, ¶79.

The server therefore sends to the mobile communication device a ***message relating to the content*** in the form of an in-game character message asking the player if they would like to drink Pepsi. Ex. 1003, ¶105.

Hays discloses that the advertisements are ***pre-selected***. Ex. 1003, ¶¶106-107. For example, 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.

Hays also discloses that requests for advertisements (*i.e.*, ***in-game video game content***) from the mobile communication device to the server include an identification of the “client type,” which may be a “type of game console” (e.g., ***model type associated with the mobile communication device***), and that advertisements are selected based on the client type. *See supra* Limitation 1[d]; Ex. 1003, ¶106; Ex. 1005, ¶¶ 40, 43-44. Hays uses the term “game console” generally

to include mobile communication devices. *See supra* Limitation 1[pre]; Ex. 1005, ¶¶23, 51.

Advertisement targeting and selection can also be 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). *Id.*, ¶44. Different service providers have different ranges of IP addresses, and so the use of an IP address for selecting an advertisement constitutes selection based on a service provider. Ex. 1003, ¶106.

- (g) **1[f]: send the in-game video game content to the mobile communication device as the updated content for the mobile video game.**

Hays discloses that the server is configured to *send the in-game video game content to the mobile communication device as the updated content for the mobile video game*. Ex. 1003, ¶¶108-110. Hays discloses that “selected advertisements” (*i.e. in-game video game content*) are uploaded to the game playing device (*i.e. mobile communication device*). Specifically, Hays discloses that “[t]he selected advertisements [*i.e. in-game video game content*] are then sent back to the requesting advertising request handler 210 and transmitted [*i.e. sent*] back to the advertisement recipient client for display.” Ex. 1005, ¶43. As discussed above in limitation 1[c], the “advertisement recipient client” is “a game playing device 126

(e.g., a console, computer, portable game device, etc.),” *i.e. a mobile communication device*. Ex. 1005, ¶32

Hays discloses that the advertisement is *updated content for the mobile video game*, because when the advertisements are sent, they are presented on the mobile communications device. Ex. 1003, ¶110. Specifically, Hays states that “[w]hen a game is played at a player’s gaming device,” the advertisements are “presented in the appropriate available ad units at the appropriate time *during game play*.” Ex. 1005, ¶21. An example includes the advertisement management service system sending “a game character [that] may move around a screen holding a can of Pepsi and ask player if they would like a drink.” *Id.*, ¶79.

2. Claim 2: The system of claim 1, wherein the updated content comprises promotional content.

As discussed above in claim 1, Hays discloses *updated content* in the form of advertisements, which are *promotional content*. Ex. 1003, ¶111. For example, Hays discloses “a game character [that] may move around a screen holding a can of Pepsi and ask player if they would like a drink.” Ex. 1005, ¶79.

3. Claim 3: The system of claim 2, wherein the promotional content comprises localized promotional content based on a location of the mobile communication device.

Hays discloses *wherein the promotional content comprises localized promotional content based on a location of the mobile communication device*. Ex. 1003, ¶¶112-114. Hays discloses that “the advertisement server 114 may select

advertisements [*i.e. promotional content*] based upon ... location.” Ex. 1005, ¶30.

Hays further discloses that “advertising can be further targeted based on specific demographic characteristics of a game player” including their “geographic location.”

Id., ¶44. A POSITA would understand that the location of a player is *the location of the mobile communication device* used by that player. Ex. 1003, ¶113.

A POSITA would also find it obvious to use the location of the mobile communication device (*e.g.*, using GPS coordinates) as the “geographic location” of the player. Ex. 1003, ¶114. A POSITA would have known that the location of the mobile device is most likely to be the current location of the player, and is a better indicator of geographic location than other available alternatives (*e.g.*, an address manually entered by the player during registration). *Id.* A POSITA would also reasonably expect this modification to succeed because it would simply involve the well-known practice of obtaining the location of the mobile communication device through a GPS module and including the GPS location with the request for an advertisement. *Id.*

4. **Claim 4: The system of claim 1, wherein identifying what in-game video game content to send is based on a model type associated with the mobile communication device, a service subscription associated with the mobile communications device, a service provider for the service subscription**

associated with the mobile communication device, or a location of the mobile communications device.

Hays discloses *wherein identifying what in-game video game content to send is based on a model type associated with the mobile communication device, a service subscription associated with the mobile communications device, a service provider for the service subscription associated with the mobile communication device, or a location of the mobile communications device.* Ex. 1003, ¶¶115-120.

As discussed above for limitations 1[d] and 1[e], Hays discloses that a request for advertisements (*i.e. in-game video game content*) includes “a unique identifier to indicate the *client type*,” which can include a “*type of game console ...*” Ex. 1005, ¶40. The “advertising matching and weighting” then computes the “weight” of an advertisement based on that “*client type*.” *Id.*, ¶¶40, 43. Targeting may also be based on the player’s “IP address,” which is associated with a service provider. *Id.*, ¶44; Ex. 1003, ¶116. Targeting may also be based on the location of the mobile communication device. *See supra* Claim 3. The server then *identifies what in-game video game content to send* based on the calculated weights. Ex. 1005, ¶43.

- 5. Claim 5: The system of claim 1, wherein 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.**

Hays discloses *wherein 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. Ex. 1003, ¶¶119-123. For example, Hays discloses “available ad units” which are “*spaces*” that include “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 ..., and so on.” Ex. 1005, ¶18. Such “ad units” are *in-game placement locations of in-game video game content.* Ex. 1003, ¶120.

Hays discloses that the available ad units (*i.e. in-game placement locations*) are *sent to the mobile communication device as part of the updated content.* Ex. 1003, ¶121. Hays discloses that the “advertisement server 114” provides advertisements (*i.e. in-game video game content*) to the mobile communication device and sends these “lists of advertisements *for specific available ad units,*” meaning that the server specifies which advertisements are for which specific ad units. Ex. 1005, ¶29; Ex. 1003, ¶121. For example, when Hays describes an interactive ad unit where “a game character eating a brand name energy bar to boost her power in the game” (Ex. 1005, ¶19) the server would need to indicate which advertisement from a plurality of sent advertisements should be used for the power-boosting in-game item. Ex. 1003, ¶121.

Hays also discloses that “advertisers use insertion orders” to request placement of their advertisements on “specific available ad unit[s] for a defined

period of time and view frequency.” *Id.*, ¶57. For example, “a company may request its logo to be placed on any panel trucks in Zone 7 of the game.” *Id.* These “insertion orders” are “entered onto the advertisement serving database.” *Id.*, ¶58. The same database is used to retrieve advertisements and associated data to send to the client device. *Id.*, ¶¶30, 43. A POSITA would understand that ad unit specified by the insertion order must be sent to the mobile communication device in order to identify the ad unit (*i.e.* ***in-game placement location***) selected by the advertiser for display of the advertisement in-game. Ex. 1003, ¶122.

A POSITA would have also found it obvious to send the specific ad unit (*i.e.* ***in-game placement location***) with the advertisement sent to the mobile communication device because it would enable fulfillment of contractual obligations to the advertiser, *e.g.*, to display ads at specific in-game locations. *Id.*, ¶123. A POSITA would have reasonably expected such a combination to succeed because the modification would simply include the straightforward step of sending information already stored by the server as part of the response to a request from the mobile communication device. *Id.*

6. **Claim 6: The system of claim 1, wherein the server is further configured to check whether the mobile communication device should receive the updated content before sending the updated content to the mobile communication device.**

Hays discloses *the server is further configured to check whether the mobile communication device should receive the updated content before sending the*

updated content to the mobile communication device. Ex. 1003, ¶¶124-127. For example, Hays discloses that “[t]he advertisement recipient database 122 contains information about the technical media formats accepted by each advertising destination within an advertisement recipient client and about which advertising has been *specifically approved for each advertisement recipient client* by a game publisher/developer.” Ex. 1005, ¶42. “Only advertisements that can provide the correct media format for the requested destination and that have been *specifically approved to be displayed* within the client may be included in the set of advertising.” *Id.* This specific approval meets the claimed checking whether the device should receive the advertisement. Ex. 1003, ¶¶125-126.

Hays also discloses that “the advertising matching and weighting system 220” uses “frequency caps (e.g. a limit as to a number of times a particular advertisement is displayed in a single game session or level/location in the game).” Ex. 1005, ¶45. The frequency caps are another way of *checking whether the device should receive updated video-game content.* Ex. 1003, ¶127.

7. Claim 7: The system of claim 1, wherein the server is further configured to track the distribution of updated content.

Hays discloses *the server is further configured to track the distribution of updated content.* Ex. 1003, ¶¶128-131. For example, 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,” *i.e.* ***the mobile communication device***. Ex. 1005, ¶38.

Hays also discloses that “the active session database 124 records the advertisements that have been delivered to a session,” *i.e.*, the advertisement server ***tracks which advertisements have been uploaded to the mobile device***. *Id.*, ¶45. This tracking function enables “frequency caps (e.g. a limit as to a number of times a particular advertisement is displayed in a single game session or level/location in the game),” which confirms that it tracks ***the distribution of advertisements [i.e., updated content]***. *Id.*; Ex. 1003, ¶130.

Hays also 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).” *Id.*, ¶25. Tracking information about advertisement impressions requires also tracking which advertisements were delivered to a mobile device. Ex. 1003, ¶131.

8. Claim 8: The system of claim 1, wherein the server is further configured to check for availability of bandwidth before sending the updated content to the mobile communication device.

Hays discloses ***the server is further configured to check for availability of bandwidth before sending the updated content to the mobile communication device***. Ex. 1003, ¶¶132-134. For example, Hays discloses that “advertisements

may be *downloaded ‘in the background’* [i.e., *sending updated content to the mobile communication device*] during times when the advertisement recipient client 104 is *connected to the advertisement management service system 108* [i.e., based on *availability of bandwidth*], including when the gaming device is performing other tasks.” Ex. 1005, ¶34. Sending advertisements may also be “done sporadically, [or] periodically.” *Id.*, ¶21. Both disclosures are examples of Hays’s advertisement and/or media server checking for the availability of bandwidth (*e.g.*, the presence of a connection or unused bandwidth) before sending updated content. Ex. 1003, ¶ 133.

Hays also discloses that advertisements (i.e., *updated content*) may be provided to the mobile devices by various means, including “cable connections, satellite, telephone line, etc.” Ex. 1005, ¶34. A POSITA would have understood that each of these communication means may have different associated bandwidths, and so the server would need to determine the bandwidth being used before sending the updated content. Ex. 1003, ¶134.

9. Claim 9

- (a) **9[pre]: A method for providing updated content associated with a mobile video game to a mobile communication device, the method comprising:**

To the extent the preamble is limiting, Hays discloses this limitation.² *See*

Section IX.A.1(a) (limitation 1[pre]).

- (b) 9[a]: storing, on a storage medium, pre-selected in-game video game content for use in a video game;**

See Section IX.A.1(b) (limitation 1[a]).

- (c) 9[b]: receiving, at a server, a request from the mobile communication device for updated content from the mobile communication device;**

See Sections IX.A.1(c) and (d) (limitations 1[b] and 1[c]).

- (d) 9[c]: identifying, by the server in response to receiving the request, what pre-selected in-game video game content to send;**

See Section IX.A.1(e) (limitation 1[d]).

- (e) 9[d]: sending a message relating to the in-game video game content from the server to the mobile communication device in response to receiving the request, wherein the message is pre-selected by the server based on 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; and**

See Section IX.A.1(f) (limitation 1[e]).

- (f) 9[e]: sending, from the server, the pre-selected in-game video game content to the mobile**

² Claims 9-16 are analogous method claims to claims 1-8, respectively, and are generally rendered obvious for the same reasons provided above. Ex. 1003, ¶135.

communication device as the updated content for the mobile video game.

See Section IX.A.1(g) (limitation 1[f]).

- 10. Claim 10: The method of claim 9, wherein the updated content is promotional content.**

See Section IX.A.2 (claim 2).

- 11. Claim 11: The method of claim 10, wherein the promotional content is localized promotional content based on a location of the mobile communication device.**

See Section IX.A.3 (claim 3).

- 12. Claim 12: The method of claim 9, wherein identifying what in-game video game content to send is based on a model type associated with the mobile communication device, a service subscription associated with the mobile communications device, a service provider for the service subscription associated with the mobile communication device, or a location of the mobile communications device.**

See Section IX.A.4 (claim 4).

- 13. Claim 13: The method of claim 9, further comprising sending information from the server to the mobile communication device regarding the in-game placement location of in-game video game content.**

See Section IX.A.5 (claim 5).

- 14. Claim 14: The method of claim 9, further comprising checking whether the mobile communication device should receive the updated content before sending the updated content to the mobile communication device.**

See Section IX.A.6 (claim 6).

15. Claim 15: The method of claim 9, further comprising tracking the distribution of updated content at the server.

See Section IX.A.7 (claim 7).

16. Claim 16: The method of claim 9, wherein the server checks for availability of bandwidth before sending the updated content to the mobile communication device.

See Section IX.A.8 (claim 8).

B. Ground 2: Claims 1-16 Are Rendered Obvious By Hays and Choi

As discussed above in Ground 1, Hays renders obvious claims 1 through 16. The combination of Hays and Choi provides an additional alternative obviousness theory for limitation 1[e]/9[d], claims 3/11, and claims 8/16. Ex. 1003, ¶¶136-159. Thus, the combination of Hays and Choi also renders obvious claims 1-16.

1. Rationale to Combine Hays and Choi

A POSITA would have found it obvious to modify Hays's system for providing advertisements to a mobile game by incorporating Choi's teachings of carrier-based and location-specific advertising. Ex. 1003, ¶¶137-147.

References cannot be combined as obvious unless they are analogous art to the challenged patent. Hays and Choi are analogous art to the '056 patent, as they all are directed to delivering updated content, such as advertisements, to video games. *See* Ex. 1001, Abstract ("Systems and methods for updating content of a mobile video game allow for mobile communication devices to receive updated content for video games that operate on the devices."); Ex. 1005, ¶17 ("An

advertisement delivery scheme and associated computerized facility allow advertisers to deliver their campaign messages to specific audiences they wish to target across one or multiple game titles played across multiple platforms (e.g., PC, console, mobile, etc.) ...”); Ex. 1006, Abstract, ¶3 (“Methods and systems for managing distribution and retrieval of data (for example advertising content and viewing statistics) ... into pre-existing mobile applications” such as “portable game consoles”); Ex. 1003, ¶138.

A POSITA would have been motivated to modify Hays according to Choi’s teachings. Ex. 1003, ¶139. In particular, a POSITA would have been motivated to modify Hays to include Choi’s teaching of “request[ing] demographic information from the carrier” of the mobile communication device to use in the selection of advertisements, as well as Choi’s teaching of using “GPS location information to request location-specific advertising” and “characteristic[s] of the target device environment” such as “speed (bandwidth and latency).” Ex. 1006, ¶¶84, 43, 89.

With respect to information from the carrier, a POSITA would be motivated to request and use such information as taught by Choi because of the information’s well-known benefits for targeted advertising without impinging privacy concerns and regulations. Ex. 1003, ¶¶140, 144. Choi explains that “[i]t is generally not permissible by advertising industry standard practices to transmit or store any user-related information in such a way that the user identity can be determined from that

information.” Ex. 1006, ¶84. However, some information about the user can be inferred by the user’s carrier because “a users’ carrier implies a certain demographic.” *Id.*, ¶86; *see also id.* ¶96 (“[S]ome carriers have users that are older, younger, businesses, family, etc.”). Choi teaches that the carrier identity is either “typically known at application download time” or can be obtained by having the mobile communication device “send[] a text message to an email address monitored by the ad server” because “the source address domain will identify the carrier.” *Id.*, ¶86.

A POSITA would further be motivated to combine the references because Hays already discloses that its advertising system selects targeted advertising based on “predicted demographic information about the players.” Ex. 1005, ¶36; Ex. 1003, ¶141. However, Hays does not expressly describe how to obtain such predicted demographic information. A POSITA would understand that Choi provides one way of obtaining predicted demographic information by obtaining the user’s carrier, which “implies a certain demographic.” Ex. 1006, ¶86; Ex. 1003, ¶141. Thus, this combination is the application of a known technique (determining demographic information from carrier information) to a known device ready for improvement (Hays’s system for targeted advertisements) to yield predictable results. Ex. 1003, ¶141.

With respect to GPS location information, a POSITA would be motivated to request and use such information as taught by Choi because of the information's well-known benefits for targeted advertising. Ex. 1003, ¶¶142, 144. Choi teaches that its "Ad Manager module can use GPS location information to request location-specific advertising content from the network server." Ex. 1006, ¶43. A POSITA would be motivated to use GPS location because the GPS location of the mobile communication device is useful information for targeted advertising. Ex. 1003, ¶142.

A POSITA would be further motivated because Hays already describes "select[ing] advertisements based upon a variety of factors, including location." Ex. 1005, ¶¶30, 44. Hays, however, does not expressly describe how a user's geographic location is determined. Ex. 1003, ¶143. A POSITA would understand that Choi provides one well-known method for obtaining a user's location: the device's GPS location information. *Id.* Thus, this combination is the application of a known technique (GPS location) to a known device ready for improvement (Hays's system for targeted advertisements) to yield predictable results. *Id.*

With respect to bandwidth information, a POSITA would be motivated to request and use such information as taught by Choi because of the information's well-known benefits for targeted advertising. Ex. 1003, ¶144-146. In particular, Choi teaches that its "mobile advertising system can...select ads based on ad targeting objectives as described above but selects creatives from within an ad

collection based on the capabilities of the device environment to which the ad is to be served.” Ex. 1006, ¶43. A POSITA would know for instance, that advertisements requiring more bandwidth would not be appropriate for mobile devices operating with low bandwidth. Ex. 1003, ¶145.

A POSITA would be further motivated because Hays already describes that “advertisements may be downloaded ‘in the background’ during times when the advertisement recipient client 104 is connected to the advertisement management service system 108, including when the gaming device is performing other tasks.” Ex. 1005, ¶34. Thus, this combination is the application of a known technique (checking available bandwidth) to a known device ready for improvement (Hays’s system for targeted advertisements) to yield predictable results. Ex. 1003, ¶146.

A POSITA would have reasonably expected the proposed Hays and Choi combination to succeed. Ex. 1003, ¶147. Choi describes a simple method for determining information such as carrier information, device capabilities, location, and bandwidth. And a POSITA would already understand that the device’s GPS location could be obtained from the device’s GPS chipset. Thus, incorporating Choi’s teachings into Hays would be well within the capabilities of a POSITA, because such modifications would be straightforward to implement. *Id.* Hays already uses similar information for targeted advertising. *Id.*

2. Limitation 1[e]/9[d]

The combination of Hays and Choi renders obvious limitations 1[e] and 9[d].
Ex. 1003, ¶¶148-151.

Choi discloses *that the server is configured to send a message relating to the in-game video game content to the mobile communication device in response to receiving the request.* Ex. 1003, ¶¶149. For instance, Choi describes that “the ad server returns the content to the [mobile] application [i.e., to *the mobile communication device*]” and that “ad content can include meta-data [i.e., a *message relating to the in-game video game content*] such as the following: CPM (cost per mille impressions), CPA (cost per action), ad priority or desired sequencing relative to other ads, desired inventory placements, desired impressions frequency, desired maximum impressions, desired duration of each impression, desired impressions times and geographic locations, and expiration date.” Ex. 1006, ¶78.

Choi also discloses that ads (and therefore messages relating to ads) are targeted based on information such as *the model type associated with the mobile communication device* or *a service provider associated with the mobile communication device.* Ex. 1003, ¶150. For example, Choi discloses “ad targeting” through the use of “user demographic and contextual information.” Ex. 1006, ¶83. One source of demographic information is “from the carrier” because “a users’ carrier implies a certain demographic.” *Id.*, ¶86; *see also id.* ¶96 (“[S]ome carriers

have users that are older, younger, businesses, family, etc.”). Choi teaches that the carrier can be obtained by having the mobile application “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.” *Id.*, ¶86; Ex. 1003, ¶138.

As discussed above, in the Hays-Choi combination, Hays uses demographic information for selection of advertisements, which includes the demographic information obtained from the mobile device’s carrier as taught by Choi. Ex. 1003, ¶151. As a result, the Hays-Choi combination renders obvious limitation 1[e] and 9[d].

3. Claims 3 and 11

The combination of Hays and Choi renders obvious claims 3 and 11. Ex. 1003, ¶¶152-154.

Choi discloses “ad [*i.e.*, ***promotional content***] targeting [that] depends on ... tracking usage location based on GPS [*i.e.*, ***a location of the mobile communication device***].” Ex. 1006, ¶83. For example, Choi discloses that “the Ad Manager module can use GPS location information to request location-specific advertising content [*i.e.*, ***localized promotional content***] from the network server.” *Id.*, ¶43; Ex. 1003, ¶¶152-153.

As discussed above, in the Hays-Choi combination, Hays uses geographic information for selection of advertisements, which includes the GPS location information obtained from the mobile connection device as taught by Choi. Ex. 1003, ¶154. As a result, the Hays-Choi combination renders obvious claims 3 and 11.

4. Claims 4 and 12

The combination of Hays and Choi renders obvious claims 4 and 12. Ex. 1003, ¶¶155-156.

As discussed above for limitations 1[e] and 9[d], discloses identifying advertisements (*i.e.*, ***in-game video game content***) and messages to send based on information including the service provider associated with a mobile device. *See* Section IX.B.2; Ex. 1003, ¶156. Choi also discloses selecting advertisements and messages based on the GPS location of a mobile device. *See* Section IX.B.3; Ex. 1003, ¶ 156. As a result, the Hays-Choi combination renders obvious claims 4 and 12.

5. Claims 8 and 16

The combination of Hays and Choi renders obvious claims 8 and 16. Ex. 1003, ¶¶157-159.

Choi discloses that content may be selected “from within an ad collection based on the capabilities of the device environment to which the ad is to be served,”

and that those “capabilities” include “speed (bandwidth and latency).” Ex. 1006, ¶89. Thus, Choi discloses selecting an advertisement to display based on the bandwidth of the mobile device, and, accordingly, checks the bandwidth before sending the advertisement [*i.e.*, ***updated content***]. Ex. 1003, ¶158.

As discussed above, in the Hays-Choi combination, Hays uses client information for selection of advertisements, which includes bandwidth information obtained from the mobile connection device as taught by Choi. Ex. 1003, ¶159. As a result, the Hays-Choi combination renders obvious claims 8 and 16.

C. Ground 3: Claim 5 and 13 Are Rendered Obvious by Hays (or Hays and Choi) in Further View of Chu

As discussed above in Grounds 1 and 2, Hays (or Hays and Choi) render obvious claims 5 and 13. The combination of Hays (or Hays and Choi) in further view of Chu is an additional obviousness theory for claims 5 and 13. Ex. 1003, ¶¶160-169.

1. Rationale to Combine Hays (or Hays and Choi) with Chu

A POSITA would have found it obvious to modify Hays’s system (or the Hays-Choi combined system) for providing advertisements to a mobile game by incorporating Chu’s teachings of requesting and receiving advertisements for specific in-game locations. Ex. 1003, ¶¶161-166.

As discussed above, Hays, Choi and the ’056 patent are analogous art, as they are all directed to delivering updated content, such as advertisements, to video

games. Chu is also directed to the same field of endeavor. *See* Ex. 1007, Abstract (“[A]n online game advertising system ... for enabling ... interactive advertisements ... that appear within an online video game.”); Ex. 1003, ¶162.

A POSITA would have been motivated to modify Hays (or further modify the Hays-Choi combination) according to Chu’s teachings. Ex. 1003, ¶163. In particular, a POSITA would have been motivated to modify Hays (or the Hays-Choi combination) to include Chu’s teaching of requesting “advertising metadata and schedules that determine what advertisements are to display in *specified locations* within the game,” and receiving advertisements that include “[a] location object (530, 630) [that] represents *the location within a game* at which advertisements are to appear.” Ex. 1007, 14:20-15:5.

A POSITA would have been motivated to incorporate these teachings from Chu because of the well-known benefits of being able to display advertisements at in-game locations. Ex. 1003, ¶164. Chu explains that “[a] campaign in one embodiment is a grouping of related advertisements that are scheduled or configured to display in a common location during a common time period.” Ex. 1007, 9:66-10:1. Thus, a POSITA would be motivated by the benefit of improved advertising options (e.g., selecting popular in-game locations or targeting ads to relevant in-game locations), and thus advertising sales. Ex. 1003, ¶164.

A POSITA would further be motivated because Hays already discloses that its advertising system provides for targeted advertising for specific in-game locations. Ex. 1003, ¶165. For example, Hays discloses “available ad units” which are “*spaces*” that include “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 ..., and so on.” Ex. 1005, ¶18. To the extent Patent Owner argues that Hays does not explicitly disclose that such locations are provided by the ad server, a POSITA would be motivated to include Chu’s teachings of providing in-game locations for specific advertisements. Ex. 1003, ¶165. The combination is the application of a known technique (ad server providing in-game location for specific advertisements) to a known device ready for improvement (Hays’s system that designates specific in-game locations for advertisements) to yield predictable results. *Id.*

A POSITA would have reasonably expected the proposed Hays and Chu combination to succeed. Ex. 1003, ¶166. Chu describes a simple method for requesting and receiving advertisements for specific in-game locations, and Hays describes using specific in-game locations to display advertisements. Thus, incorporating Chu’s teachings into Hays would be well within the capabilities of a POSITA, because such modifications would be straightforward to implement. *Id.*

2. Claims 5 and 13

The combination of Hays (or Hays and Choi) with Chu renders obvious claims 5 and 13. Ex. 1003, ¶¶167-169.

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.” Ex. 1007, 14:20-15:5; Ex. 1003, ¶168.

As discussed above, in the Hays-Chu (or Hays-Choi-Chu) combination, Hays already displays advertisements at specific in-game locations, which are received by Hays’s system using Chu’s teachings of requesting and receiving advertisements at specific in-game locations. Ex. 1003, ¶169. As a result, the Hays-Chu combination renders obvious claims 5 and 13.

D. Ground 4: Claims 1-16 Are Rendered Obvious by Levkovitz

1. Claim 1

(a) Limitation 1[pre]

To the extent the preamble is limiting, Levkovitz discloses a *system for providing updated content associated with a mobile video game to a mobile communication device*. Ex. 1003, ¶¶171-172. For example, Levkovitz discloses providing “contextual and/or noncontextual placement of content, e.g., advertisements or banners [*i.e. updated content associated with a mobile video*

game], within an application executed by a cellular phone, a mobile phone, or other wireless communication device [*i.e. mobile communication device*].” Ex. 1008, ¶5. The application could be “games for mobile phones.” *Id.*, ¶6; *see also* ¶123 (“The application 176 may be ... a game”), ¶127 (“a first application 176 (e.g., a chess game)”, “a second application 176 (e.g. a racing game).”); Ex. 1003, ¶172.

(b) Limitation 1[a]

Levkovitz discloses *a storage medium for storing in-game video game content*. Ex. 1003, ¶¶173-175. For example, Levkovitz discloses that “the server may include a memory unit [*i.e. storage medium*] to store a plurality of content items [*i.e. in-game video game content*] from which the content item is selected.” Ex. 1008, ¶12. Levkovitz also teaches that “ad server 150 may ... search a content items repository 118 [*i.e. storage medium*] within ad server 110 for one or more content items [*i.e. in-game video game content*].” *Id.*, ¶126.

The “content items” may be “advertisements.” *Id.*, ¶152. 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*. *Id.*, ¶127. The content items are “previously stored in the content items repository 118” and are therefore stored. *Id.*, ¶126; *see also* ¶147 (“Data transferor 124 may distribute content items to ad server(s) 110 periodically and/or in advance.”).

(c) Limitation 1[b]

Levkovitz discloses *a server in communication with the storage medium*. Ex. 1003, ¶¶176-177. Levkovitz discloses that “the server may include a memory unit [*i.e. storage medium*] to store a plurality of content items” and that “the server... cop[ies] the content of the volatile memory into a non-volatile memory” of the memory unit, thereby indicating that *the server communicates with the storage medium*. Ex. 1008, ¶¶12-14. Levkovitz further discloses that “ad server 150 ... may search a content items repository 118 [*i.e. storage medium*] within ad server 110 for one or more content items,” which indicates that *the server communicates with the storage medium*. *Id.*, ¶126.

(d) Limitation 1[c]

Levkovitz discloses *wherein the server is configured to: receive a request for updated content from the mobile communication device*. Ex. 1003, ¶¶178-181. For example, Levkovitz discloses that “games for mobile phones” (*i.e. mobile communication device*) may “request content” (*i.e. updated content*) from an “ad server” which will “selectively serve content items to the content client, based on parameters related to the mobile phone.” Ex. 1008, ¶6.

Levkovitz also discloses that “device 170,” *e.g.*, “a wireless communication device, a wireless communication station, ... a wireless phone, a mobile phone” (*id.*, ¶175), may include an application 176” which “may be ... a game.” *Id.*, ¶123. The application has “a content client 174” which sends “a wireless signal indicating a

request (‘content request’) to receive one or more content items, e.g., ... advertisement.” *Id.*; Ex. 1003, ¶180.

Levkovitz further discloses that the server *receives the request*. Ex. 1003, ¶181. The “ad server 110” receives content requests from a mobile communication device via “communicator 150.” Ex. 1008, ¶126. The content request is “received by communicator 150” which is “operatively connected” to “ad server 110.” Ex. 1008, ¶¶125-126 (“Ad server 110 may process content requests stored in the queue 158 of communicator 150.”); ¶165 (“Communicator 150 ... may transfer a formatted content request to ad server 110.”).

(e) Limitation 1[d]

Levkovitz discloses that the server is further configured to *identify, in response to receiving the request, what in-game video game content to send*. Ex. 1003, ¶¶182-183. For example, Levkovitz discloses that “[a]d server 110 may process content requests” by “search[ing] a content items repository 118 within an ad server 110 for one or more content items [*i.e. what in-game video game content to send*] which match the requirements of the content request.” Ex. 1008, ¶126. The “ad server 110 may selectively determine which content items ... match the content request being processed, e.g. using queries, filters, selection rules, capping rules, or other conditions or criteria.” *Id.* For example, the ad server may select an advertisement “based on properties of device 170, e.g., handset model, screen

resolution, screen color depth, audio capabilities, total memory, available memory, types of content items which the device 170 is capable to present, or the like.” *Id.* Thus, advertisements are identified *in response to the request* based on the requested parameters. Ex. 1003, ¶183.

(f) **Limitation 1[e]**

Levkovitz discloses *that the server is configured to send 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 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.* Ex. 1003, ¶¶184-187.

Levkovitz discloses that after the device requests content from an “ad server,” the “ad server may selectively serve content items to the content client, based on parameters related to the mobile phone, e.g., manufacturer identifier, model identifier, available memory, presentation capabilities, or the like.” Ex. 1008, ¶6. Such parameters, especially the manufacturer and model identifiers, are *factors of a type of mobile communication device*. See also *id.*, ¶126 (“[A]d server 110 may select one or more content items which may be adequately presented by device 170 based on properties of device 170, e.g., *handset model* ...”); Ex. 1003, ¶171.

With respect to the “message relating to the in-game video content,” Levkovitz explains for instance that, in response to the device’s request, the server “may further transmit to device 170 ... together with the content item(s) ..., one or more presentation rules associated with the transmitted content items.” Ex. 1008, ¶129; Ex. 1003, ¶186.. These rules include “for example, a capping rule to 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; a rule instructing device 170 to present a certain content item at a certain time or within a certain time window; a rule instructing device 170 to present the content items in accordance with a certain order or priority scheme; or other suitable rules or data to control the presentation of the content items.” Ex. 1008, ¶129. These rules are *messages relating to content* because they “specify details about the available updated content,” specifically which advertisements that may be displayed and how and when they may be displayed. Ex. 1001, 10:1-3.

Because 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. Ex. 1003, ¶187. For example, Levkovitz describes that capping rules, which is an example of a

presentation rule, are “pre-defined rules, e.g. *specific* campaign-related rules” that “cap the number of times that a *certain content item* may be presented.” Ex. 1008, ¶¶129, 142. Thus, the server may select an advertisement based on the type of mobile communication device that is also part of a campaign with a specific, pre-defined capping rule. This capping rule is sent to the device with the advertisement. Thus, the capping rule (*i.e. message related to content*) is pre-selected based on the type of mobile communication device. Ex. 1003, ¶187.

(g) Limitation 1[f]

Levkovitz discloses that the server is configured to *send the in-game video game content to the mobile communication device as the updated content for the mobile video game*. Ex. 1003, ¶¶188-190. For example, Levkovitz discloses that an “ad server” may “serve content items [*i.e. in-game video content*] directed for presentation using a first application 176 (e.g., a chess game) [*i.e. as the updated content for the mobile video game*] .” Ex. 1008, ¶127. The “[d]evice 170 may present the content item(s),” such as “within application 176, during or together with the execution of application 176.” *Id.*, ¶131. For example, “the user may complete a level in the game, and the first advertisement may be presented.” *Id.*, ¶320. The presentation of the advertisement within a game shows that the content is *updated in-game content for the mobile video game*. Ex. 1003, ¶189.

2. Claim 2

As discussed above in claim 1, Levkovitz discloses *updated video-game content* in the form of advertisements, which are *promotional content*. Ex. 1003, ¶191.

3. Claim 3

Levkovitz discloses *wherein the promotional content comprises localized promotional content based on a location of the mobile communication device*. Ex. 1003, ¶¶192-193. For example, Levkovitz discloses a “presentation rule” where “an advertisement for a certain shop, be presented when *device 170 is geographically located* within a pre-defined distance (e.g., 300 meters) of the address of that shop.” Ex. 1008, ¶187. These presentation rules are provided by “communicator 150” to “device 170 ... together with the content item(s).” *Id.*, ¶129. In these examples, an advertisement [*i.e., localized promotional content*] is selected *based on the location of the mobile communication device*, e.g., the proximity of its location to a particular shop. Ex. 1003, ¶193.

4. Claim 4

Levkovitz discloses *wherein identifying what in-game video game content to send is based on a model type associated with the mobile communication device, a service subscription associated with the mobile communications device, a service provider for the service subscription associated with the mobile communication device, or a location of the mobile communications device*. Ex. 1003, ¶¶194-196.

Levkovitz discloses that after the device requests content from an “ad server,” the “ad server may selectively serve content items to the content client, based on parameters related to the mobile phone, e.g., manufacturer identifier, model identifier, available memory, presentation capabilities, or the like.” Ex. 1008, ¶6. Such parameters, especially the manufacturer and model identifiers, are *a model type associated with a communication device*. See also *id.*, ¶126 (“[A]d server 110 may select one or more content items which may be adequately presented by device 170 based on properties of device 170, e.g., *handset model* ...”); Section IX.D.1(f); Ex. 1003, ¶195. Levkovitz may also select content *based on the location of the mobile communication device*. See Section IX.D.3; Ex. 1003, ¶196.

5. Claim 5

Levkovitz discloses *wherein 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*. Ex. 1003, ¶¶197-198. For example, Levkovitz discloses that an “ad server” may “serve content items directed for presentation using a first application 176 (e.g., a chess game).” Ex. 1008, ¶127. Levkovitz also discloses that such “content items may have multiple versions corresponding to a descriptive property of device 170, e.g., a full-size content item which *may fill the entire screen of device* 170, a half-screen size content item which may occupy approximately *one half of the screen of device 170*, a quarter-screen

size content item which may include a square-shaped or rectangular content item which may *occupy approximately one quarter of the screen of device 170*, or the like” Ex. 1008, ¶133. 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. Ex. 1003, ¶198..

6. Claim 6

Levkovitz discloses *the server is further configured to check whether the mobile communication device should receive the updated content before sending the updated content to the mobile communication device*. Ex. 1003, ¶¶199-200. For example, Levkovitz discloses that “the server is to serve the content item if a number of previously-served content items is smaller than a pre-defined quota.” Ex. 1008, ¶22. Moreover, the “ad server 110 may selectively determine which content items ... match the content request being processed, e.g. using queries, filters, selection rules, capping rules, or other conditions or criteria.” *Id.*, ¶126. The ad server can also select content items based on “types of content items which the device 170 is capable to present.” *Id.* In each of these examples, Levkovitz checks whether the mobile communication device should receive the advertisement (*e.g.* based on filters, capping rules, or device capabilities) before sending the advertisement. Ex. 1003, ¶200.

7. Claim 7

Levkovitz discloses *the server is further configured to track the distribution of updated content*. Ex. 1003, ¶¶201-202. Levkovitz discloses that “[d]evice 170 may ... log information related to presentations performed by device 170, e.g., data indicating the content item(s) presented [*i.e. distribution of updated content*] .” Ex. 1008, ¶132; *see also id.*, ¶143 (“Control server 120 ... may monitor and track the *distribution of content items*”), 154 (“Ad server 110 may ... store in memory unit 118 a log tracking the activity or servings [*i.e. distribution*] done by ad server 110.”), 171 (“Communicator 150 may further store in memory unit 159 a log tracking the activity or transmission [*i.e. distribution*] done by communicator 150.”).

8. Claim 8

Levkovitz discloses *the server is further configured to check for availability of bandwidth before sending the updated content to the mobile communication device*. Ex. 1003, ¶¶203-204. For example, Levkovitz discloses that “ad selector 113 may process or parse the content request received from communicator 150 to obtain information about the device 170 from which the content request originated, and may correlate between such device information and content items attributes accommodating such information.” Ex. 1008, ¶160. Further, Levkovitz discloses that that system may “receive content request data, for example, information about device 170, information about the functional capabilities of device 170.” *Id.* ¶172.

A POSITA would understand that “information about the device” would include information about the availability of bandwidth, i.e., the connection between the device and the server. Ex. 1003, ¶204

9. Claims 9-16

Claims 9-16 are analogous method claims to claims 1-8, respectively, and are generally rendered obvious for the same reasons provided above for claims 9-16. The specific mapping of analogous limitations and claims are the same as set forth in Ground 1. *See* Sections IX.A.9-16; *see also* Ex. 1003, ¶205.

E. Ground 5: Claims 5 and 13 are Rendered Obvious by Levkovitz and Chu

1. Rationale to Combine Levkovitz with Chu

A POSITA would have found it obvious to modify Levkovitz’s system for providing advertisements to a mobile game by incorporating Chu’s teachings of requesting and receiving advertisements for specific in-game locations. Ex. 1003, ¶¶206-211.

As discussed above, Chu and the ’056 patent are analogous art, as they are both directed to delivering updated content, such as advertisements, to video games. *See* Section IX.C.1. Levkovitz is also directed to the same subject matter. *See* Ex. 1008, Abstract (“Devices, systems and methods of presentation of delivering targeted advertisements using Wireless Application Protocol.”); ¶123 (“The application 176 may be, for example, a game ...”); Ex. 1003, ¶207.

A POSITA would have been motivated to modify Levkovitz according to Chu's teachings. Ex. 1003, ¶208. In particular, a POSITA would have been motivated to modify 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," and receiving advertisements that include "[a] location object (530, 630) [that] represents *the location within a game* at which advertisements are to appear." Ex. 1007, 14:20-15:5.

A POSITA would have been motivated to incorporate these teachings from Chu because of the well-known benefits of being able to display advertisements at in-game locations. Ex. 1003, ¶209. For example, Chu explains that "[a] campaign in one embodiment is a grouping of related advertisements that are scheduled or configured to display in a common location during a common time period." Ex. 1007, 9:66-10:1. Thus, a POSITA would be motivated by the benefit of improved advertising options (e.g., selecting popular in-game locations or targeting ads to relevant in-game locations), and thus advertising sales. Ex. 1003, ¶209.

A POSITA would further be motivated because Levkovitz already discloses that its advertising system provides conditions for display of advertisements in a video game. Ex. 1003, ¶210. For example, Levkovitz discloses that the "[s]elector 172 may select ... one or more content items for presentation, e.g., content items matching one or more rules, conditions or criteria related to the content items or to

properties associated with their presentation.” Ex. 1008, ¶186. The specific in-game locations for advertisements described by Chu are also a “propert[y] associated with [the advertisements’] presentation.” Thus, the combination is the application of a known technique (ad server providing in-game location for advertisements) to a known device ready for improvement (Levkovitz’s system for the presentation of advertisements) to yield predictable results. Ex. 1003, ¶210.

A POSITA would have reasonably expected the proposed Levkovitz and Chu combination to succeed. Ex. 1003, ¶211. Chu describes a simple method for requesting and receiving advertisements for specific in-game locations, and Levkovitz describes applying conditions and properties to the presentation of in-game advertisements. Incorporating Chu’s teachings into Levkovitz would be well within the capabilities of a POSITA, because such modifications would be straightforward to implement. *Id.*

2. Claims 5 and 13

The combination of Levkovitz with Chu renders obvious claims 5 and 13. Ex. 1003, ¶¶212-214.

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.” Ex. 1007, 14:20-15:5; Ex. 1003, ¶213.

As discussed above, in the Levkovitz-Chu combination, Levkovitz already discloses “presentation rules” for in-game advertisements, and those “presentation rules” would include the received in-game locations for advertisements as taught by Chu. Ex. 1003, ¶214. As a result, the Levkovitz-Chu combination renders obvious claims 5 and 13.

F. Ground 6: Claims 8 and 16 are Rendered Obvious by Levkovitz and Choi

1. Rationale to Combine Levkovitz with Choi

A POSITA would have found it obvious to modify Levkovitz’s system for providing advertisements to a mobile game by incorporating Choi’s teachings of carrier-based advertising. Ex. 1003, ¶¶215-220.

As discussed above, Choi and the ’056 patent are analogous art, as they are both directed to delivering updated content, such as advertisements, to video games. *See* Section IX.B.1. Levkovitz is also directed to the same subject matter. *See* Section IX.E.1; Ex. 1003, ¶216.

A POSITA would have been motivated to modify Levkovitz according to Choi’s teachings. Ex. 1003, ¶217. In particular, a POSITA would have been motivated to modify Levkovitz to include Choi’s teaching of using information

about a mobile devices “capabilities” including “characteristics of the target device environment” such as “speed (bandwidth and latency).” Ex. 1006, ¶89.

A POSITA would be motivated to request and use bandwidth information as taught by Choi because of the information’s well-known benefits for targeted advertising. Ex. 1003, ¶218. In particular, Choi teaches that its “mobile advertising system can...select ads based on ad targeting objectives as described above but selects creatives from within an ad collection based on the capabilities of the device environment to which the ad is to be served.” Ex. 1006, ¶43. A POSITA would know for instance, that advertisements requiring more bandwidth would not be appropriate for mobile devices operating with low bandwidth. Ex. 1003, ¶218.

A POSITA would further be motivated because Levkovitz already discloses that its advertising system provides conditions for display of advertisements in a video game. Ex. 1003, ¶219. For example, Levkovitz discloses that the “[s]elector 172 may select ... one or more content items for presentation, e.g., content items matching one or more rules, conditions or criteria related to the content items or to properties associated with their presentation.” Ex. 1008, ¶186. Further, Levkovitz discloses that that system may “receive content request data, for example, information about device 170, information about the functional capabilities of device 170.” *Id.* ¶172.

A POSITA would have reasonably expected the proposed Levkovitz and Choi combination to succeed. Ex. 1003, ¶220. Choi describes a simple method for determining the mobile communication device’s capabilities, and Levkovitz describes applying conditions and properties to the presentation of in-game advertisements. Thus, incorporating Choi’s teachings into Levkovitz would be well within the capabilities of a POSITA, because such modifications would be straightforward to implement. *Id.*

2. Claims 8 and 16

The combination of Levkovitz and Choi renders obvious claims 8 and 16. Ex. 1003, ¶¶221-223.

Choi discloses that content may be selected “from within an ad collection based on the capabilities of the device environment to which the ad is to be served,” and that such “capabilities” include “any characteristic of the target device environment” such as “speed (bandwidth and latency).” Ex. 1006, ¶89.

As discussed above, in the Levkovitz-Choi combination, Levkovitz uses client information for selection of advertisements, which includes bandwidth information obtained from the mobile connection device as taught by Choi. Ex. 1003, ¶223. As a result, the Levkovitz-Choi combination renders claims 8 and 16 obvious.

X. DISCRETIONARY DENIAL

A. 35 U.S.C. §314(a)

The Board has discretion to deny institution under §314(a). In addition to the strong merits presented herein, Petitioner also hereby provides a *Sotera*-type stipulation and stipulates that if the Board institutes *inter partes* review, Petitioner will not pursue in the district court litigation any ground raised or that could have reasonably been raised in the petition. This stipulation precludes discretionary denial under §314(a). *See* Director Vidal Memorandum, Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation, at 3-5, 7-8 (June 21, 2022).

Moreover, the six-factor *Fintiv* analysis weighs in favor of the Board declining to exercise discretionary denial. The district court has not indicated it will grant or deny a stay, and so that factor is neutral. Currently, trial is set for November 18, 2024, which will be approximately five to six months before the Board's statutory deadline for a final written decision, which given the proximity weighs slightly against denial or at best is neutral. Moreover, the litigation is at an early stage—the parties have only just served infringement and invalidity contentions, have produced a minimal amount of documents, have not deposed any witnesses, and have not begun claim construction briefing. And because of the above *Sotera*-type stipulation, there will be no overlap of issues. These factors weigh strongly in

favor of not denying. Finally, the strong merits presented herein also weigh in favor of not exercising discretionary denial. Together, the factors weigh in favor of the Board declining to exercise its discretion to deny the petition.

B. 35 U.S.C. §325(d)

The Board should decline to deny institution under §325(d) because the PTO has not previously considered the same or substantially the same prior art and arguments Petitioner presents here, and the Examiner committed error in evaluating the prior art of record. The references relied upon in this Petition, including Hays, Choi, Chu, and Levkovitz, were neither cited nor considered during prosecution of the '056 patent. None of the cited references contain a substantially similar disclosure of a mobile game with dynamically updated hot spots represented in-game as non-promotional background objects, as is disclosed in the combinations described in the Grounds presented herein. Thus, the Board should decline to deny institution under the discretionary authority of §325(d).

XI. MANDATORY NOTICES AND FEES

A. Real Party-In-Interest

The real parties-in-interest for Petitioner are PLR Worldwide Sales Limited and Playrix Holdings Ltd.

B. Related Matters

Flip Phone Games, Inc. v. PLR Worldwide Sales Limited, 2:23-cv-00139-JRG (E.D. Tex.)

C. Counsel and Service Information

Petitioner provides the following counsel and service information.

Petitioner consents to electronic service the email addresses listed in the table below. Pursuant to 37 C.F.R. § 42.10(b), a Power of Attorney accompanies this Petition.

LEAD COUNSEL	BACK-UP COUNSEL
James M. Glass (Reg. No. 46729) jimglass@quinnemanuel.com QUINN EMANUEL URQUHART & SULLIVAN, LLP 51 Madison Avenue, 22nd Floor New York, NY 10010 Tel: (212) 849-7000 Fax: (212) 849-7100	Quincy Lu (Reg. No. 76,954) quincylu@quinnemanuel.com QUINN EMANUEL URQUHART & SULLIVAN, LLP 1109 First Avenue, Suite 210 Seattle, WA 98101 Tel: (206) 905-7000 Fax: (206) 905-7100 Ron Hagiz (<i>pro hac vice</i> to be requested upon grant authorization) ronhagiz@quinnemanuel.com QUINN EMANUEL URQUHART & SULLIVAN, LLP 51 Madison Avenue, 22nd Floor New York, NY 10010 Tel: (212) 849-7000 Fax: (212) 849-7100 Nima Hefazi (Reg. No. 63,658) nimahefazi@quinnemanuel.com QUINN EMANUEL URQUHART & SULLIVAN, LLP 865 S. Figueroa St., 10th Floor Los Angeles, CA 90017 Tel: (213) 443-3000 Fax: (213) 443-3100

D. Payment of Fees

The undersigned authorizes the Office to charge the fee required for this Petition for *Inter Partes* Review to Deposit Account No. 50-5708. Any additional fees that might be due are also authorized.

XII. CONCLUSION

Petitioner requests institution of an IPR and cancellation of the Challenged Claims.

Date: November 15, 2023

Respectfully submitted,

By: /s/ James M. Glass
James M. Glass

Counsel for Petitioner

**CERTIFICATE OF COMPLIANCE WITH
TYPE-VOLUME LIMITATION, TYPEFACE REQUIREMENTS,
AND TYPE STYLE REQUIREMENTS**

1. This Petition complies with the type-volume limitation of 14,000 words, comprising 13,268 words, as counted using the Microsoft Word software that was used to prepare this paper, excluding the parts exempted by 37 C.F.R.

§ 42.24(a).

2. This Petition complies with the general format requirements of 37 C.F.R. § 42.6(a) and has been prepared using Microsoft® Word 2016 in 14-point Times New Roman.

Date: November 15, 2023

By: /s/ James M. Glass
James M. Glass
QUINN EMANUEL URQUHART
& SULLIVAN, LLP
51 Madison Avenue, 22nd Floor
New York, NY 10010
Tel: (212) 849-7000
Fax: (212) 849-7100

Counsel for Petitioner

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on November 16, 2023, true and correct copies of the foregoing document and supporting materials were served in its entirety on the Patent Owner at the following address of record as listed on PAIR via Priority Mail Express® or Express Mail:

FINNEGAN, HENDERSON,
FARABOW, GARRETT & DUNNER
LLP
901 NEW YORK AVENUE, NW
WASHINGTON, DC 20001-4413
Official Correspondence Address

Courtesy copies were also sent via electronic mail to Patent Owner's counsel of record in the related district court proceeding

FPG1367020@kilpatricktownsend.com

Date: November 15, 2023

By: /s/ James M. Glass
James Glass
QUINN EMANUEL URQUHART
& SULLIVAN, LLP
51 Madison Avenue, 22nd Floor
New York, NY 10010
Tel: (212) 849-7000
Fax: (212) 849-7100

Counsel for Petitioner