

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. IPR2024-00171

U.S. Patent No. 10,617,958

**PETITION FOR *INTER PARTES* REVIEW
OF U.S. PATENT NO. 10,617,958**

TABLE OF CONTENTS

I.	Introduction.....	1
II.	Standing	2
III.	Identification of Challenge And Relief Requested.....	2
IV.	Level Of Ordinary Skill In The Art.....	2
V.	The '958 patent	3
	A. Overview	3
	B. Prosecution History of the '958 patent.....	3
VI.	Technology Background.....	4
	A. Video Games	4
	B. Mobile Games	5
	C. Dynamic Content and In-Game Ads	6
VII.	Overview Of The Prior Art.....	7
	A. Hays (Ex. 1005).....	8
	B. Chu (Ex. 1007)	9
	C. Levkovitz (Ex. 1008).....	10
VIII.	Claim Construction.....	11
IX.	Detailed Explanation of Invalidity Grounds.....	11
	A. Ground 1: Claims 1-14 are Rendered Obvious in View of Hays	11
	1. Claim 1	11
	2. Claim 2: The system of claim 1, wherein the updated content is promotional content.....	20

3.	Claim 3: The system of claim 1, wherein the server sends information to the mobile communication device regarding the in-game placement location of the content, the information being part of the updated content.	20
4.	Claim 4: The system of claim 1, wherein the server sends a message to the mobile communication device in response to receiving the request, the message relating to the content.	23
5.	Claim 5: The system of claim 4, 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.	24
6.	Claim 6: The system of claim 1, wherein the server checks whether the mobile communication device should receive the updated content before sending the updated content to the mobile communication device.	28
7.	Claim 7: The system of claim 1, wherein the server tracks the distribution of updated content.	29
8.	Claims 8-14	31
B.	Ground 2: Claims 3 and 10 Are Rendered Obvious by Hays in Further View of Chu.....	31
1.	Rationale to Combine Hays with Chu	32
2.	Claims 3 and 10.....	34
C.	Ground 3: Claims 1-2, 4-9, And 11-14 Are Rendered Obvious by Levkovitz.....	35
1.	Claim 1	35
2.	Claim 2: The system of claim 1, wherein the updated content is promotional content.....	42

3.	Claim 4: The system of claim 1, wherein the server sends a message to the mobile communication device in response to receiving the request, the message relating to the content.	42
4.	Claim 5: The system of claim 4, 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.	43
5.	Claim 6: The system of claim 1, wherein the server checks whether the mobile communication device should receive the updated content before sending the updated content to the mobile communication device.	44
6.	Claim 7: The system of claim 1, wherein the server tracks the distribution of updated content.	45
7.	Claims 8-9, 11-14.....	46
D.	Ground 4: Claims 3 and 10 Are Rendered Obvious by Levkovitz and Chu	46
1.	Rationale to Combine Levkovitz with Chu	46
2.	Claims 3 and 10.....	49
X.	Discretionary Denial.....	50
A.	35 U.S.C. §314(a).....	50
B.	35 U.S.C. §325(d).....	51
XI.	Mandatory Notices And Fees	51
A.	Real Party-In-Interest	51
B.	Related Matters.....	52
C.	Counsel and Service Information	52

D.	Payment of Fees	54
XII.	Conclusion	54

EXHIBIT LIST

Ex.	Description
1001	U.S. Patent No. 10,617,958 (“’958 patent”)
1002	File History for U.S. Patent No. 10,617,958
1003	Declaration of Dr. José Zagal
1004	<i>Curriculum Vitae</i> of Dr. José Zagal
1005	U.S. Patent Pub. No. 2008/0102947 (“Hays”)
1006	Intentionally Left Blank
1007	U.S. Patent No. 7,698,178 (“Chu”)
1008	U.S. Patent Pub. No. 2007/0088801 (“Levkovitz”)
1009	U.S. Patent No. 9,129,301
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 pre-selected in-game advertising for use in a video game;
1[b]	a server in communication with the storage medium; and
1[c]	an interface coupled to the server and a network, wherein the interface receives a request for updated content from the mobile communication device over the network; wherein the server is operative to receive the request through the interface
1[d]	and utilize the request to: check what pre-selected in-game advertising to send; and
1[e]	send the pre-selected in-game advertising stored on the storage medium to the mobile communication device as the updated content for the mobile video game.
2	The system of claim 1, wherein the updated content is promotional content.
3	The system of claim 1, wherein the server sends information to the mobile communication device regarding the in-game placement location of the content, the information being part of the updated content.
4	The system of claim 1, wherein the server sends a message to the mobile communication device in response to receiving the request, the message relating to the content.

Claim	Limitation
5	The system of claim 4, 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.
6	The system of claim 1, wherein the server checks 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 tracks the distribution of updated content.
8[pre]	A method for providing updated content associated with a mobile video game to a mobile communication device, the method comprising:
8[a]	storing pre-selected in-game advertising for use in a video game on a storage medium;
8[b]	receiving, at an interface coupled to a server and a network, a request for updated content from the mobile communication device over the network; receiving the request at the server through the interface; and
8[c]	utilizing the request to: identify what pre-selected in-game advertising to send; and

Claim	Limitation
8[d]	send the pre-selected in-game advertising stored on the storage medium to the mobile communication device as the updated content for the mobile video game.
9	The method of claim 8, wherein the updated content is promotional content.
10	The method of claim 8, further comprising sending information from the server to the mobile communication device regarding the in-game placement location of the content, the information being part of the updated content.
11	The method of claim 8, further comprising sending a message from the server to the mobile communication device in response to receiving the request, the message relating to the content.
12	The method of claim 11, 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.
13	The method of claim 8, further comprising checking whether the mobile communication device should receive the updated content before sending the updated content to the mobile communication device.

Claim	Limitation
14	The method of claim 8, further comprising tracking the distribution of updated content at the server.

I. INTRODUCTION

PLR Worldwide Sales Limited (“Petitioner”) respectfully requests *inter partes* review of claims 1-14 (the “Challenged Claims”) of U.S. Patent No. 10,617,958 (the “’958 patent”) pursuant to 35 U.S.C. §311 and 37 C.F.R. §42.100.

The ’958 patent, which is a divisional of an application filed on June 26, 2007, claims a system and method for providing pre-selected, in-game advertisements to be displayed in a mobile game based on a request by a mobile device. 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 most or all of the dependent claims.

For example, Hays describes a system for presenting 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 pre-selected advertisement based on numerous factors, including the type of mobile device that was sent with the request. 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 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 filters defined in the request. The advertisement is then displayed within the video game application.

II. STANDING

Petitioner certifies that the '958 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 1–9 (“Challenged Claims”) on the following grounds:

Ground	Reference(s)	Basis	Claims
1	Hays	§103	1-14
2	Hays, Chu	§103	3, 10
3	Levkovitz	§103	1-2, 4-9, 11-14
4	Levkovitz, Chu	§103	3, 10

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, ¶¶62-66. 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.*, ¶67.

V. THE ’958 PATENT

A. Overview

U.S. Pat. No. 10,617,958 (the “’958 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 ’958 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.*, 5:56-59. 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.*, 5:64-6:5; Ex. 1003, ¶¶52-55.

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, 6:11-13; Ex. 1003, ¶56.

B. Prosecution History of the ’958 patent

The ’958 patent was filed on July 10, 2017 as Application No. 15/645,028. Ex. 1001. It is a divisional application to application No. 11/768,892, filed June 26,

2007, which is now Pat. No. 9,731,202. Petitioner has filed a Petition against the '202 patent using similar grounds as those presented here. See IPR2024-00132.

During prosecution of the '958 patent, the examiner made several rejections of the presented claims as unpatentable over U.S. Patent Pub. No. 2007/0124792 (“Bennett”) and U.S. Patent Pub. No. 2004/0127279 (“Gatto”). In response to these rejections, applicant agreed to amend “content” to the currently as-claimed “in-game advertisement.” See, e.g., Ex. 1002, 84, 37-38 (Examiner’s Amendment in Notice of Allowance); Ex. 1003, ¶¶57-59

Both of Petitioner’s primary references, Hays and Levkovitz, “in-game advertisement.” Neither reference was cited or considered by the examiner. Ex. 1003, ¶60.

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, ¶41; 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, ¶42; 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, ¶42; 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, ¶43; 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, ¶43; 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, ¶44; 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, ¶44; 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, ¶44; 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, ¶45; Ex. 1014 at 1. Indeed, as the '958 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, 1:13-16, 1:25-27.

Although mobile game development posed some unique challenges, hardware manufacturers and software developers quickly adapted to meet these challenges. Ex. 1003, ¶¶45-46. 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, ¶¶46-47; 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, ¶¶48-49. 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, ¶50. 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, ¶50; 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, ¶51; *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, ¶¶70-71. 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. Ex. 1003, ¶¶72-74.

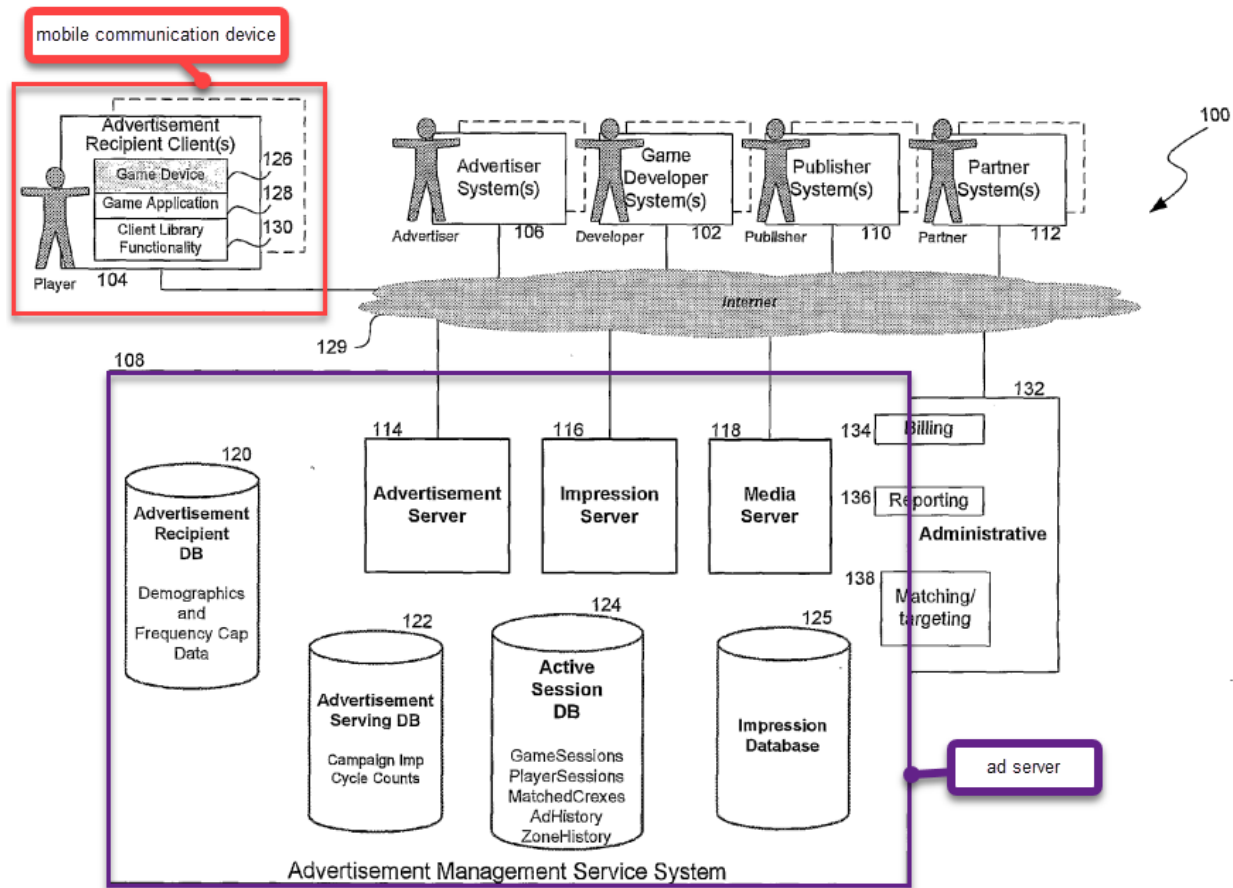


FIG. 1A

B. 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 “[A]n 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; Ex. 1003, ¶¶75-76.

C. Levkovitz (Ex. 1008)

U.S. Patent Pub. No. 2007/0088801 (“Levkovitz”) was filed on May 4, 2006 and published on April 19, 2007. It 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).” 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; Ex. 1003, ¶¶77-79.

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 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, ¶¶68-69.

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, ¶¶80-176.

A. Ground 1: Claims 1-14 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, ¶¶83-86. Hays describes “[a]n advertisement delivery scheme and associated computerized facility” that “allow advertisers to deliver their campaign messages [*i.e. updated content*] 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. For example, Hays discloses that “[w]hen ***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*] 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. Because the advertisements are “in the appropriate ad units at the appropriate time during game play,” they are ***associated with the video game***. Ex. 1003, ¶84.

According to the ’958 patent, ***updated content*** includes advertisements. Ex. 1001, 6:44-50 (“[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, ¶85.

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, ¶86.

(b) 1[a]: a storage medium for storing pre-selected in-game advertising for use in a video game;

Hays discloses **a storage medium for storing pre-selected in-game advertising for use in a video game**. Ex. 1003, ¶¶87-89. For example, Hays discloses “an advertisement server” that includes “one or more **database components** [*i.e.* **storage medium**] that contain ... media files,” which are “pull[ed]” and “pass[ed] ... to the game code, so that specific **advertisements** may be presented in the appropriate available ad units at the appropriate time during game play [*i.e.* **in-game advertising**].” Ex. 1005, ¶¶20-21. Hays also discloses an “advertisement management service system 108” which includes “a media server 118 (which **stores** and serves specific media files containing **advertisement display/audio information** ...).” *Id.*, ¶28. Hays discloses that the “database components” and “media server” on which advertisements are stored include one or more **storage media** such as “computer-readable media, including magnetically or optically readable computer discs, hard-wired or preprogrammed chips (e.g., EEPROM

semiconductor chips), nanotechnology memory, biological memory, or other data storage media.” *Id.*, ¶98; Ex. 1003, ¶88. Moreover, a POSITA would readily understand that Hays’s “advertisement server” or “media server 118” includes a “medium” for storing (such as a hard drive, memory, etc.) since they store media files. Ex. 1003, ¶¶88. A POSITA would understand that “media files” are electronic files stored on one of these examples of storage media. *Id.*

Hays discloses that the advertisements are ***pre-selected***. Ex. 1003, ¶89. 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 XYC 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. Ex. 1003, ¶89.

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

Hays discloses ***a server in communication with the storage medium***. Ex. 1003, ¶90. 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, including its storage medium as identified above in limitation 1[a]. 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. Thus, the advertisement server is in communication with the media server, including its storage medium as identified above, so that it can store and receive media files. Ex. 1003, ¶90.

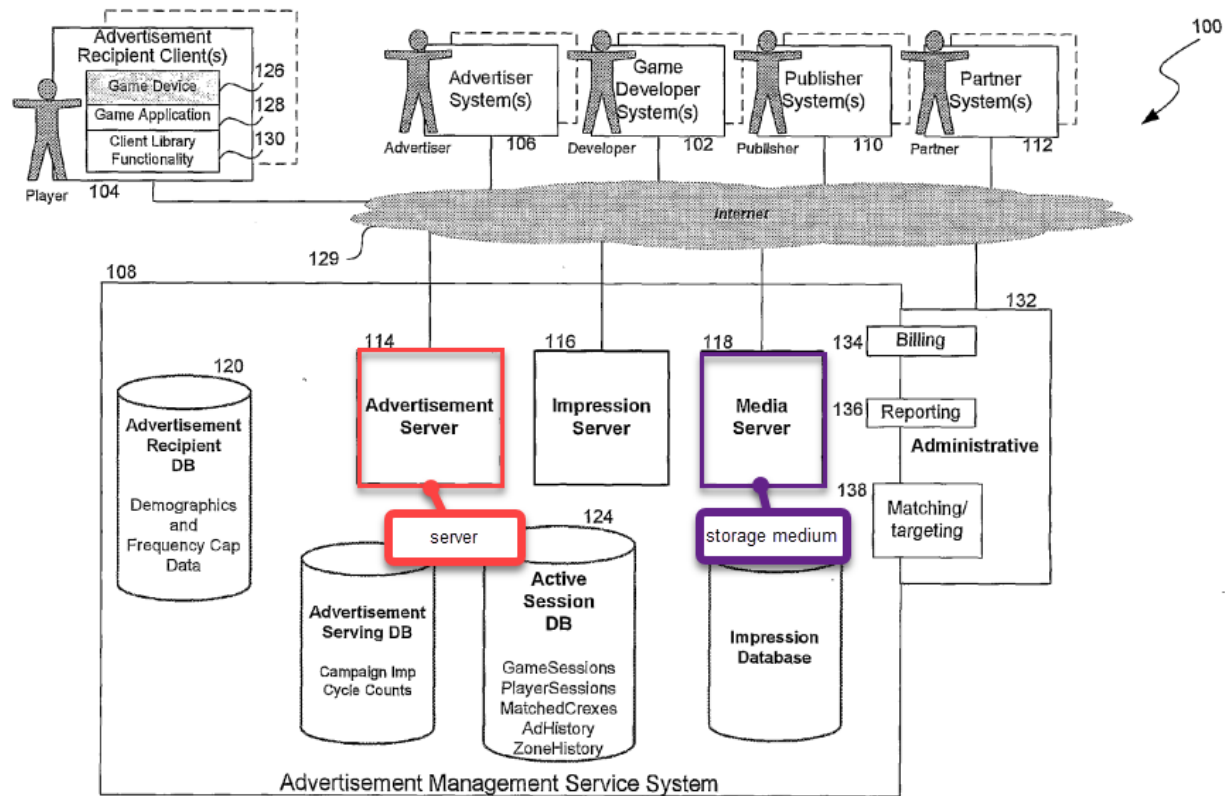


FIG. 1A

- (d) **1[c]: an interface coupled to the server and a network, wherein the interface receives a request for updated content from the mobile communication device over the network; wherein the server is operative to receive the request through the interface**

Hays discloses *the server is operative to receive a request for updated content from the mobile communication device over the network*. Ex. 1003, ¶¶91-95. 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*, ...)” and that it “may *request* and receive *advertisements [i.e. updated content]* from the advertisement management service system 108 and may be configured to establish communication *via a communication link*, such as the Internet 129 [*i.e. network*].” Ex. 1005, ¶32; Fig. 1A. Specifically, “the advertisement server 114 [*i.e. server*] may fulfill requests received from the advertisement recipient client 104.” *Id.*, ¶29. And as mentioned in 1[pre], the game playing device also includes “cellular or mobile phones.” *Id.*, ¶51; Ex. 1003, ¶92.

Figure 1A depicts that communications between the mobile communication device and server (including requests) occur via Internet 129. Ex. 1003, ¶93.

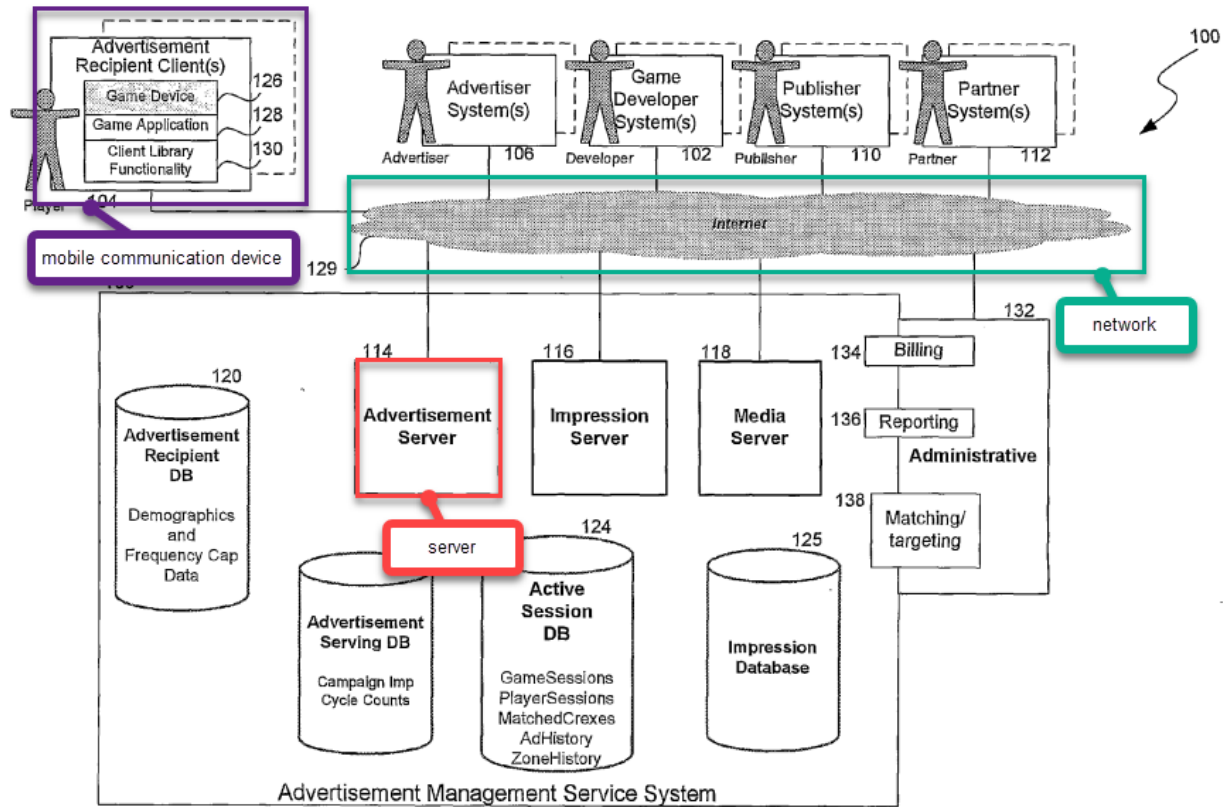


FIG. 1A

Hays further discloses that the server *receives the request through an interface coupled to the server and network*. Ex. 1003, ¶94. As just discussed, the mobile communication device sends a request to the server via Internet 129. *Id.* Hays discloses that such requests are received “via a network connection.” *See, e.g.*, Ex. 1005, Abstract, cl. 1, ¶3. A POSITA would understand that by disclosing that the server is has a network connection, Hays also expressly discloses that the connection would be through an interface, for example, a network card or network interface. Ex. 1003, ¶94. This is because an endpoint (such as a server) on a network cannot communicate with the network (including with other endpoints on the

network) unless the endpoint has an interface for interacting with that network, such as a network interface card that supports the network's protocol (be it Ethernet or Wi-Fi or anything else). *Id.* Thus, a POSITA would understand that when Hays describes the server receiving a request "via a network connection," it means receiving the request using an interface that connects the server and the network. *Id.*

To the extent Patent Owner argues that Hays does not expressly disclose a network interface, it would have been obvious to include a network interface in Hays' server for connecting to a network, including the Internet. *Id.*, ¶95. At the time of the invention, network-related network technology was mature and network protocols (such as, for example, Ethernet or Wi-Fi) were well-known and established. *Id.* Commercial network interface cards ("NICs") were also well known and readily available, and were known to work with and to routinely be included with server hardware in order to provide network access. *See, e.g.*, Ex. 1009, 12:32-35 ("WLAN interface 675 such that device can exchange data with other computing devices utilizing an 802.11x wireless protocol."; 13:27-29 ("network interface ... in order to establish a network connection"); Ex. 1003, ¶95.

(e) 1[d]: and utilize the request to: check what pre-selected in-game advertising to send; and

Hays discloses *utilizing the request to check what pre-selected in-game advertising to send*. Ex. 1003, ¶¶96-98. For example, Hays discloses that when the mobile communication device sends a request for in-game advertisements, 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” forwards 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. In other words, Hays discloses checking which *pre-selected advertisement* to send using weights assigned to advertisements that were determined using information from the request. Ex. 1003, ¶98.

- (f) **1[e]: send the pre-selected in-game advertising stored on the storage medium to the mobile communication device as the updated content for the mobile video game.**

Hays discloses *sending the pre-selected in-game advertising stored on the storage medium to the mobile communication device as the updated content for the mobile video game*. Ex. 1003, ¶¶99-100. Hays discloses that “selected advertisements” (*i.e. pre-selected in-game advertising as updated content*) are sent to the game playing device (*i.e. mobile communications device*). *Id.* Specifically,

Hays discloses that “[t]he selected advertisements are then sent back to the requesting advertising request handler 210 and transmitted back to the advertisement recipient client for display.” Ex. 1005, ¶43. As discussed above in limitation 1[a], the “advertisement recipient client” is “a game playing device 126 (e.g., a console, computer, portable game device, etc.),” *i.e.* **a communications device**. Also as discussed above in limitation 1[a], the advertisements are stored in a storage medium (such as the storage media of a database or server) and they are pre-selected. Ex. 1003, ¶99.

The advertisement recipient client displays the advertisements “in the appropriate available ad units at the appropriate time during game play.” Ex. 1005, ¶21. Thus, they are **updated content for the mobile video game**. Ex. 1003, ¶100.

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

As discussed above in claim 1, Hays discloses **updated content** that includes advertisements, which are **promotional content**. Ex. 1003, ¶101. 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 1, wherein the server sends information to the mobile communication device regarding

the in-game placement location of the content, the information being part of the updated content.

Hays discloses *information regarding the in-game placement location of updated content*. Ex. 1003, ¶¶102-106. 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 regarding advertising (i.e. updated content)*. Ex. 1003, ¶103.

Hays discloses that available ad units (*i.e. in-game placement locations*) are *sent to the mobile communication device by the server as part of the updated content*. Ex. 1003, ¶104. As discussed above in claim 1, Hays discloses that the “advertisement server 114” provides advertisements (*i.e. updated content*) to the mobile communication device. Hays further discloses that “the advertisement server 114” sends these “requested lists of advertisements *for specific available ad units*,” in other words, the server specifies which advertisements are for which specific ad units. Ex. 1005, ¶29. This is because Hays describes sending multiple advertisements to the client device and therefore the client device would need to know which advertisement is associated with which ad unit, information that could only be provided by the server. Ex. 1003, ¶104. 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,” when the server sends multiple advertisements including the energy bar brand to the client device, the client device would not know the energy bar brand should be used with the power-boosting energy bar item’s ad unit unless the server provided such information. *Id.*; Ex. 1005, ¶19.

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.” Ex. 1005, ¶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), which is the same database used by “[t]he advertisement server 114” to retrieve advertisements and advertisement information to be sent to the client device. *Id.*, ¶¶30, 43. A POSITA would understand that when sending the advertisement to the mobile communication device, the ad unit requested by the advertiser is also sent to the mobile communication device because that is the only way for the device to know which ad unit (*i.e. in-game placement location*) the advertiser chose for the proper display of the advertisement in-game. Ex. 1003, ¶105.

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 a POSITA would be motivated to provide a mechanism to inform the game running on the device where to place the

advertisement, as that would fulfill the contractual obligations to the advertiser. *Id.*, ¶106. A POSITA would have reasonably expected such a combination to succeed because the modification would simply include information identifying the specific ad unit when sending an advertisement, which is information already stored by the server (such as when advertisers use “insertion orders” as described above). *Id.* Providing additional information with the server response would be a straightforward change well within the capabilities of a POSITA. *Id.*

4. Claim 4: The system of claim 1, wherein the server sends a message to the mobile communication device in response to receiving the request, the message relating to the content.

Hays discloses the server *sending a message to the mobile communication device in response to receiving the request, the message relating to the content.* Ex. 1003, ¶¶107-11. Note that according to the '958 patent, the “message relating to the content” need not be “displayed to the user.” Ex. 1001, 10:7-8.

For example, as discussed in limitation 1[e], in response to the mobile communication device’s request, Hays discloses that “selected advertisements are then sent back to the ... advertisement recipient client for display.” Ex. 1005, ¶43. The act of sending the involves sending a *message relating to the content.* Ex. 1003, ¶108. A POSITA would understand that a network packet has a particular pre-defined message format which can be populated with data such as the audiovisual data used for advertisements. *Id.*

Hays also discloses that the advertisements are “provid[ed]” as “**lists** of advertisements for specific available ad units.” *Id.*, ¶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, 10:1-3; Ex. 1003, ¶109.

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 this “data” is used by the client to “display the advertisement,” it is a **message relating to the content**. Ex. 1003, ¶110.

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, ¶111.

5. **Claim 5: The system of claim 4, 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.

Hays discloses *wherein the message is pre-selected by the server based on a model type associated with the mobile communication device or a service provider for the service subscription associated with the mobile communication device.* Ex. 1003, ¶¶112-18.

As discussed above in claim 4, Hays discloses *messages relating to content*, such as a list containing selected advertisements, data used to display the advertisements, a message associated with the advertisement (such as a message offering a drink), and the advertisements themselves. Ex. 1003, ¶113. As discussed below, the specific advertisements sent to the mobile communication device are selected based on the *model type associated with the mobile communication device* and/or the *service provider for the service subscription associated with the mobile communication device*. Thus, the messages relating to these selected advertisements are likewise pre-selected by the server based on the model type and service provider. Ex. 1003, ¶113. For example, a pre-selected Pepsi advertisement would be selected based on the device type and service provider, and as a result, the message of “ask[ing] player if they would like a drink” of Pepsi would be pre-selected based on the model type and service provider of the mobile communication device because the message would not have been selected had the advertisement not been selected based on device type and service provider. *Id.*

For example, Hays discloses that when the mobile communication device sends a request for advertisements, 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. Further targeting can 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; Ex. 1003, ¶114. 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. *Id.*

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. In other words, Hays discloses checking which advertisement to send using weights assigned to

advertisements based on the “type of game console” and demographic information associated with the service provider. Ex. 1003, ¶115.

Hays discloses that “type of game console” is a ***type of mobile communication device***. *Id.*, ¶116. Hays for example states that the term “game console ... as used generally herein ... refers to any of the above devices,” which include “hand-held devices, wearable computers, cellular or mobile phones, microprocessor systems, [and] microprocessor-based or programmable consumer electronics,” each of which are a ***type of mobile communication device***. Ex. 1005, ¶51; *see also id.*, ¶23 (“[T]he advertisement delivery scheme enables an advertiser to deliver advertising across a range of electronic mediums including consoles (such as Sony Play Station and Microsoft Xbox), PC and Macintosh computers, wireless equipment (***cellular phones and other wireless gaming devices***) ...”).

To the extent Patent Owner argues these teachings are from different embodiments, they are not, as Hays makes it clear that the above description of “game console” is how the term is “used generally herein,” *i.e.* how the term is used generally within the patent, including the teachings of weighing the advertisements based on “type of game console.” *Id.*, ¶51; Ex. 1003, ¶117. There is no indication in Hays that a “game console” has different meanings in different embodiments. *Id.*

In any case, it would have been obvious for a POSITA to combine Hays’s teachings of weighing advertisements based on the type of game console (*id.*, ¶43)

and Hays's teachings of the various mobile communication devices that constitute game consoles (*id.*, ¶51). Ex. 1003, ¶118. A POSITA would have been motivated to include as many types of game consoles in order to maximize the number of devices to which advertisements could be delivered, which could increase the revenue generated from advertisers. *Id.* Indeed, Hays teaches that its system is intended to “deliver advertising across ***a range of electronic mediums*** including ... wireless equipment (cellular phones and other wireless gaming devices).” Ex. 1005, ¶23. In other words, Hays itself provides motivation to expand the scope of supported console systems by including all of those listed in Paragraph 51. Ex. 1003, ¶118. A POSITA would also understand that by including mobile devices within the type of game consoles supported, this would increase the potential number of views of the delivered advertisements since users often play mobile games in places they would otherwise not be able to play other games, such as on the bus or subway. *Id.* POSITA would have had a reasonable expectation of success combining these teachings because Hays already teaches supporting multiple types of game consoles thus success is expected. *Id.*

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

Hays discloses the server ***checking whether the communication device should receive the updated content before sending the updated content to the***

communication device. Ex. 1003, ¶¶119-121. For example, Hays discloses that “[t]he advertisement recipient database 122,” the database from which advertisements are retrieved by the advertising matching and weighting system, “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, ¶¶42-43; Ex. 1003, ¶119. Moreover, “[o]nly 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, ¶120.

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),” which is another example of *checking whether the device should receive updated video-game content.* Ex. 1003, ¶121.

7. Claim 7: The system of claim 1, wherein the server tracks the distribution of updated content.

Hays discloses *the server tracking the distribution of updated content.* Ex. 1003, ¶¶122-25. 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,” including the distribution of updated content. Ex. 1005, ¶38; Ex. 1003, ¶123.

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***. Ex. 1005, ¶45. Hays also discloses that this tracking function allows the system to implement “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).” *Id.*, ¶45. In other words, in order to implement “frequency caps,” the system must know how many times a particular advertisement has been provided to the mobile device, which confirms that the system tracks the distribution of updated content. Ex. 1003, ¶124.

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. In order to track such information about advertisements, the system would also need to track the distribution of updated content. Ex. 1003, ¶125.

8. Claims 8-14

Claims 8-14 mirror claims 1-7, as set forth in the following chart. Hays renders these claims obvious for the same reasons as set forth above for claims 1-7.

Ex. 1003, ¶126.

Claim Limitation	Corresponding Claim Limitation(s)
8[pre]	1[pre]
8[a]	1[a]
8[b]	1[c]
8[c]	1[d]
8[d]	1[e]
9	2
10	3
11	4
12	5
13	6
14	7

B. Ground 2: Claims 3 and 10 Are Rendered Obvious by Hays in Further View of Chu

As discussed above in Ground 1, Hays renders obvious claims 3 and 10. The combination of Hays in further view of Chu is an additional obviousness theory for claims 3 and 10. Ex. 1003, ¶¶127-36.

1. Rationale to Combine Hays with Chu

A POSITA would have found it obvious to modify Hays’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, ¶¶128-33.

References cannot be combined as obvious unless they are analogous art to the challenged patent. Hays, Chu, and the ’958 patent are analogous art, as they are all 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. 1007, Abstract (“[A]n online game advertising system ... for enabling ... interactive advertisements ... that appear within an online video game.”); Ex. 1003, ¶129.

A POSITA would have been motivated to modify Hays according to Chu’s teachings. Ex. 1003, ¶130. In particular, a POSITA would have been motivated to modify Hays to include Chu’s teaching of a video game requesting “advertising

metadata and schedules that determine what advertisements are to display in ***specified locations*** within the game,” and in turn receiving advertisements that include “[a] location object (530, 630) [that] represents ***the location within a game*** at which advertisements are to appear.” 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, ¶131. 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 increased advertising sales through the ability for a server to designate which popular in-game locations would display which advertisements. Ex. 1003, ¶131. Moreover, advertisements could be targeted to relevant in-game locations, such as displaying an advertisement for a soft drink in an in-game restaurant. *Id.*

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, ¶132. 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 in order to control the location and viewing of advertisements. Ex. 1003, ¶132. Thus, this 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, ¶133. Chu describes a simple method for requesting and receiving advertisements for specific in-game locations. *Id.* And Hays describes using specific in-game locations to display advertisements. *Id.* 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 3 and 10

The combination of Hays with Chu renders obvious claims 3 and 10, which recite “the server sends information to the mobile communication device regarding the in-game placement location of the content, the information being part of the updated content.” Ex. 1003, ¶¶134-36.

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, ¶135.

As discussed above, in the Hays-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, ¶136. As a result, the Hays-Chu combination renders obvious that ***the server sends information to the mobile communication device regarding the in-game placement location of the content, the information being part of the updated content.*** *Id.*

C. Ground 3: Claims 1-2, 4-9, And 11-14 Are Rendered Obvious by Levkovitz

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, Levkovitz discloses a ***system for providing updated content associated with a mobile video game to a mobile communication device.*** Ex. 1003, ¶¶137-40. For example, Levkovitz discloses providing “contextual and/or noncontextual placement of content, e.g.,

advertisements or banners [*i.e.* **updated content**], 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, ¶139. Thus, the advertisements are associated with a **mobile video game**. *Id.*

(b) 1[a]: a storage medium for storing pre-selected in-game advertising for use in a video game;

Levkovitz discloses **a storage medium for storing pre-selected in-game advertising for use in a video game**. Ex. 1003, ¶¶140-42. 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.* **pre-selected in-game advertising**] 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.* **pre-selected in-game advertising**].” *Id.*, ¶126. Levkovitz further describes that these servers may include specific types of storage media such as “memory, removable or non-removable media, erasable or non-erasable media; writeable or re-writeable media, digital or analog media, hard disk, floppy disk, Compact Disk Read Only Memory (CD-ROM), Compact Disk Recordable (CD-R), Compact Disk Re-Writeable (CD-RW), optical disk, magnetic

media, various types of Digital Versatile Disks (DVDs), a tape, a cassette, or the like.” *Id.*, ¶387. Moreover, a POSITA would readily understand that Levkovitz’s servers include a “medium” for storing (such as a hard drive, memory, etc.) since they store content items. Ex. 1003, ¶141. A POSITA would understand that the “content items” are electronic items stored on one of these examples of storage media. *Id.*

A “content item” is, for example, a pre-selected in-game advertisement. Ex. 1003, ¶142. Content items include “advertisements.” Ex. 1008, ¶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 *pre-selected*. *Id.*, ¶126; *see also* ¶147 (“Data transferor 124 may distribute content items to ad server(s) 110 periodically and/or in advance.”); Ex. 1003, ¶142.

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

Levkovitz discloses *a server in communication with the storage medium*. Ex. 1003, ¶¶143-44. 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 memory unit, including its 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 item repository, including its storage medium.*** *Id.*, ¶126; Ex. 1003, ¶144.

- (d) 1[c]: an interface coupled to the server and a network, wherein the interface receives a request for updated content from the mobile communication device over the network; wherein the server is operative to receive the request through the interface

Levkovitz discloses ***the server is operative to receive a request for updated content from the mobile communication device over the network.*** Ex. 1003, ¶¶145-51. 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.

Similarly, Levkovitz discloses that “device 170,” which may be “a wireless communication device, a wireless communication station, ... a wireless phone, a mobile phone” (*id.*, ¶175 (describing many more examples)), 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, ¶147.

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.”). Communicator 150 includes “a network handler 155” which “control[s] network communications between communicator 150 and device 170,” thereby indicating that the request from the mobile communication device is ***over the network***. *Id.*, ¶¶165-66; Ex. 1003, ¶148.

Levkovitz further discloses that the server ***receives the request through an interface coupled to the server and network***. Ex. 1003, ¶149. As just discussed, the “ad server 110” receives content requests from a mobile communication device via “communicator 150” which is an ***interface coupled to the server and network***. Ex. 1008, ¶126; Ex. 1003, ¶149. Alternatively, communicator 150’s “network handler 155,” which “control[s] network communications between communicator 150 and device 170,” is also an ***interface coupled to the server and network*** from which content requests are received by the mobile communication device. Ex. 1008, ¶166; Ex. 1003, ¶149. The “network handler 155” has “a listener module able to detect and receive a wireless signal indicating a content request of device 170.” *Id.*

Moreover, by disclosing that the server has communications with a mobile device over a network, Levkovitz discloses that the communications are through an

interface on the server for connecting to that network and sending or receiving communications via that network. Ex. 1003, ¶150. As discussed above in Ground 1, a server cannot communicate over a network unless the server has an interface for interacting with that network. *Id.*

To the extent Patent Owner argues that Levkovitz does not expressly disclose a network interface, it would have been obvious to include a network interface in Levkovitz’s server for connecting to a network, including the Internet. Ex. 1003, ¶151. At the time of the invention, network-related network technology was mature and network protocols (such as, for example, Ethernet or Wi-Fi) were well-known and established. *Id.* Commercial network interface cards (“NICs”) were also well known and readily available, and were known to work with and to routinely be included with server hardware in order to provide network access. *See, e.g.*, Ex. 1009, 12:32-35 (“WLAN interface 675 such that device can exchange data with other computing devices utilizing an 802.11x wireless protocol.”; 13:27-29 (“network interface ... in order to establish a network connection”); Ex. 1003, ¶151.

(e) 1[d]: and utilize the request to: check what pre-selected in-game advertising to send; and

Levkovitz discloses *utilizing the request to check what pre-selected in-game advertising to send*. Ex. 1003, ¶¶152-53. For example, Levkovitz discloses that “Ad 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.* **pre-**

selected in-game advertising] 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 server selects 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, Levkovitz discloses that it selects advertisements by *utilizing the request* to determine the requested conditions for the selected advertisements. Ex. 1003, ¶153.

- (f) **1[e]: send the pre-selected in-game advertising stored on the storage medium to the mobile communication device as the updated content for the mobile video game.**

Levkovitz discloses *sending the pre-selected in-game advertising stored on the storage medium to the mobile communication device as the updated content for the mobile video game*. Ex. 1003, ¶¶154-56. For example, Levkovitz discloses that an “ad server” may “serve content items [*i.e. pre-selected in-game advertising*] directed for presentation using a first application 176 (e.g., a chess 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 content for the mobile video game***. Ex. 1003, ¶155. As discussed above in limitation 1[a], the “device 170” is a mobile communication device, the content items (advertisements) are stored in a storage medium (such as the storage media of a server), and they are pre-selected. Ex. 1003, ¶156.

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

As discussed above in claim 1, Levkovitz discloses ***updated content*** in the form of advertisements, which are ***promotional content***. Ex. 1003, ¶157.

3. Claim 4: The system of claim 1, wherein the server sends a message to the mobile communication device in response to receiving the request, the message relating to the content.

Levkovitz discloses ***wherein the server sends a message to the mobile communication device in response to receiving the request, the message relating to the content***. Ex. 1003, ¶¶158-59. For example, Levkovitz discloses 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. 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.” *Id.* 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; Ex. 1003, ¶159.

4. **Claim 5: The system of claim 4, 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.**

Levkovitz discloses ***wherein the message is pre-selected by the server based on a model type associated with the mobile communication device.*** Ex. 1003, ¶¶160-63. For example, Levkovitz discloses that the selection of content items to send to the mobile communication device is “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, ¶161.

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, ¶¶162-63. 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.” *Id.*, ¶¶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. Ex. 1003, ¶163. 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. *Id.*

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

Levkovitz discloses *the server checking whether the mobile communication device should receive the updated content before sending the updated content to the mobile communication device*. Ex. 1003, ¶¶164-65. 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.* All of these are examples of the system, prior to sending the updated content, checking whether the mobile communication device can receive the advertisement, such as ensuring the advertisement meets requested filters or capping rules, or ensuring that the mobile is capable of presenting the advertisement. Ex. 1003, ¶165.

6. Claim 7: The system of claim 1, wherein the server tracks the distribution of updated content.

Levkovitz discloses *the server tracking the distribution of updated content*. Ex. 1003, ¶¶166-67. For example, Levkovitz discloses that “[c]ontrol server 120,” which is coupled to “ad server 110,” “may monitor and *track the distribution of content items* among multiple ad servers 110.” Ex. 1008, ¶143. Levkovitz also discloses that “[a]d server 110 may ... store in memory unit 118 a *log tracking the activity or servings done by ad server 110*.” *Id.*, ¶154. Levkovitz also discloses that “[c]ommunicator 150 may further store in memory unit 159 a log *tracking the activity or transmission done by communicator 150*,” which includes advertisements (*i.e. updated content*) “transmit[ted] ... to device(s) 170.” *Id.*, ¶171. All of these are examples of the server *tracking the distribution of updated content*. E. 1003, ¶167.

7. Claims 8-9, 11-14

Claims 8-14 mirror claims 1-7, as set forth in the following chart. Levkovitz renders these claims obvious for the same reasons as set forth above for claims 1-7. Ex. 1003, ¶168.

Claim Limitation	Corresponding Claim Limitation(s)
8[pre]	1[pre]
8[a]	1[a]
8[b]	1[c]
8[c]	1[d]
8[d]	1[e]
9	2
11	4
12	5
13	6
14	7

D. Ground 4: Claims 3 and 10 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, ¶¶169-74.

As discussed above, Chu and the '958 patent are analogous art, as they are both directed to delivering updated content, such as advertisements, to video games. 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, ¶170.

A POSITA would have been motivated to modify Levkovitz according to Chu’s teachings. Ex. 1003, ¶171. 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 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.

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, ¶172. 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 increased advertising sales through the ability to display ads in a popular in-game location. Moreover, advertisements could be targeted to relevant in-game locations, such as displaying an advertisement for a soft drink in an in-game restaurant. Ex. 1003, ¶172.

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, ¶173. 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, this combination is the application of a known technique (ad server providing in-game location for specific advertisements) to a known device ready for improvement (Levkovitz’s system that allows for conditions for the presentation of advertisements) to yield predictable results. Ex. 1003, ¶173.

A POSITA would have reasonably expected the proposed Levkovitz and Chu combination to succeed. Ex. 1003, ¶174. Chu describes a simple method for requesting and receiving advertisements for specific in-game locations. *Id.* And

Levkovitz describes using applying conditions and properties to the presentation of in-game advertisements. *Id.* Thus, 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 3 and 10

The combination of Levkovitz with Chu renders obvious claims 3 and 10, which recite “the server sends information to the mobile communication device regarding the in-game placement location of the content, the information being part of the updated content.” Ex. 1003, ¶¶175-77.

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, ¶176.

As discussed above, in the Levkovitz-Chu combination, Levkovitz already allows for setting conditions and properties for the presentation of in-game advertisements, and such properties include the received in-game locations for advertisements as taught by Chu. Ex. 1003, ¶177. As a result, the Levkovitz-Chu combination renders obvious ***the server sending information to the mobile***

communication device regarding the in-game placement location of the content, the information being part of the updated content. Id.

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, Chu, and Levkovitz, were neither cited nor considered during prosecution of the '958 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.)

PLR Worldwide Sales Limited v. Flip Phone Games, Inc., IPR2024-00132

PLR Worldwide Sales Limited v. Flip Phone Games, Inc., IPR2024-00133

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, 22 nd 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, 22 nd 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 9, 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 10,975 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 9, 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 9, 2023, I caused true and correct copies of the foregoing document and supporting materials to be 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
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 9, 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