

***PLR Worldwide Sales Limited v.
Flip Phone Games Inc.***

IPR2024-00132

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

IPR2024-00200

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

Petitioner's Demonstratives

Hearing: February 6, 2025

Summary: Grounds (056 Patent)

Ground	Claim(s) challenged
1. Hays	1-16
2. Hays + Choi	1-16
3. Hays + Chu	5, 13
4. Levkovitz	1-16
5. Levkovitz + Chu	5, 13
6. Levkovitz + Choi	8, 16

Summary: Grounds (958 Patent)

Ground	Claim(s) challenged
1. Hays	1-14
2. Hays + Chu	3, 10
3. Levkovitz	1-2, 4-9, 11-14
4. Levkovitz + Chu	3, 10

Summary: Disputed Issues (Independent Claims)

- Independent claims disputed issues:
 - **“pre-selected” advertising/messages** (056 cl. 1[e], 9[d]; 958 cl. 1[a], 8[a]) (Hays, Levkovitz, Choi):
 - Hays describes categorizing (**preselecting**) ads by demographics, genre, device type
 - Levkovitz describes storing and grouping ads for later selection
 - PO misstates the Petition: the Petition does not rely on Hays’s “weighting” system for “pre-selection” limitation; nor does the Petition rely on Lefkovitz’s “selection” of ads
 - **advertising “for use”** (056 cl. 9[a]; 958 cl. 1[a], 8[a]) (Hays, Levkovitz):
 - PO’s construction requires **seven** limitations on the word “use” to avoid prior art
 - Hays and Levkovitz disclose “using” content (under ordinary meaning or PO’s construction)
 - **pre-selecting “based on” factors** (056 cl. 1[e], 9[d]; 958, cl. 5, 12) (Hays, Levkovitz, Choi):
 - PO rewrites the claims to require a “compatibility” check with no claim construction analysis
 - PO focuses on Hays’s weighting system, which Petitioner did not allege for this limitation
 - PO ignores that Levkovitz associates rules with content prior to selection
 - **“sending” advertising** (958 cl. 1[e], 8[e]) (Levkovitz):
 - PO and expert misunderstand WAP; Lefkovitz **expressly** discloses that WAP “downloads”

Summary: Disputed Issues (Dependent Claims)

- **Dependent claims disputed issues:**
 - **“identifying” content “based on” factors** (056 cl. 4, 12) (Hays, Choi):
 - Hays discloses identifying ads using a weighting system based on device type
 - **“in-game placement Location”** (056 cl. 5, 13; 958 cl. 3, 10) (Hays, Levkovitz, Chu):
 - PO argues “location” must be limited to X/Y coordinates and cannot be “standardized” (POR at 21)
 - PO provides no claim construction analysis for its position
 - Both Hays and Chu transmit in-game locations (the game asset) for the ads
 - **“tracks” content** (056 cl. 7, 15; 958 cl. 7, 14) (Hays, Levkovitz):
 - PO argues prior art does not track “all” content (Hays) or uses WAP protocol and can’t “upload” (Levkovitz) (POR 22, 45)
 - PO ignores express disclosure that **“all”** content is tracked (Hays; Reply 10)
 - PO and expert misunderstand WAP, Lefkovitz **expressly** discloses that WAP “downloads.”
 - **“check for availability of bandwidth”** (056 cl. 8, 16) (Hays, Levkovitz):
 - Hays and Levkovitz describe checking for conditions that require bandwidth
 - PO does not dispute that Choi renders this limitation obvious

Summary: Disputed Issues (Claim 1)

- **Motivation to Combine disputed issues:**
 - *Hays and Choi (056 Ground 2)*
 - PO argues Choi unnecessary because Hays already has targeted advertising
 - PO does not address Dr. Zagal's testimony regarding benefits of using the service provider
 - *Hays and Chu (056 Ground 3; 958 Ground 2)*
 - PO argues Chu is client-focused, Hays is server-focused
 - PO does not address Dr. Zagal's testimony regarding benefits of including location with the ads
 - Obviousness is not limited to combining the particular inventions
 - *Levkovitz and Chu (056 Ground 5; 958 Ground 4)*
 - PO repeats its Hays-based arguments

'056 and '958 Patent Overview

Patent Overview

- '056 Patent, Claim 1:

1. A system for providing updated content associated with a mobile video game to a mobile communication device, the system comprising:
a storage medium for storing in-game video game content;
a server in communication with the storage medium; and
wherein the server is configured to:
receive a request for updated content from the mobile communication device;
identify, in response to receiving the request, what in-game video game content to send;
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
send the in-game video game content to the mobile communication device as the updated content for the mobile video game.

Patent Overview

- '958 Patent, Claim 1:

1. A system for providing updated content associated with a mobile video game to a mobile communication device, the system comprising:
a storage medium for storing pre-selected in-game advertising for use in a video game;
a server in communication with the storage medium; and
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 and utilize the request to:
check what pre-selected in-game advertising to send; and
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.

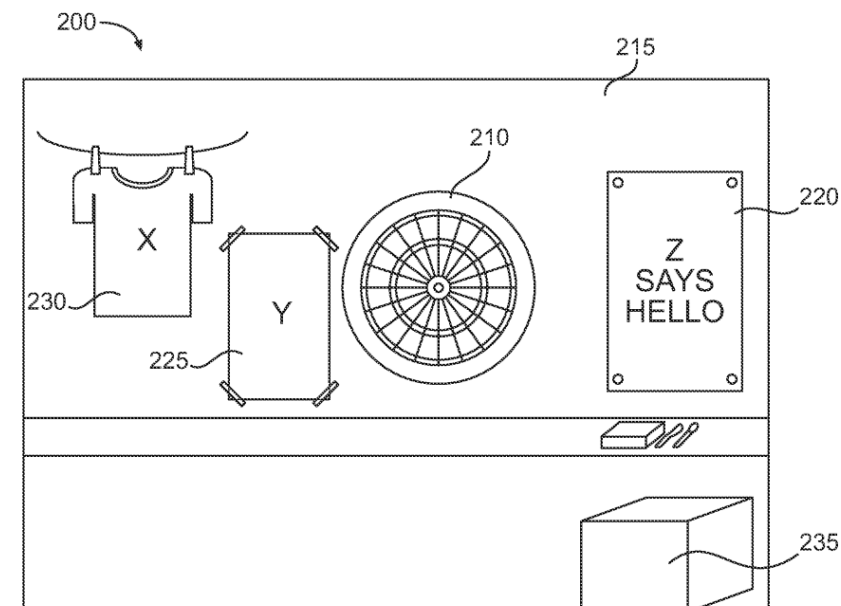
Patent Overview

“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. The updates may be **promotional in nature**, and may be **pre-selected** based on the device type, service, or service provider. ... After the updated content is received by the mobile communication device, the content may be **displayed in-game**.”

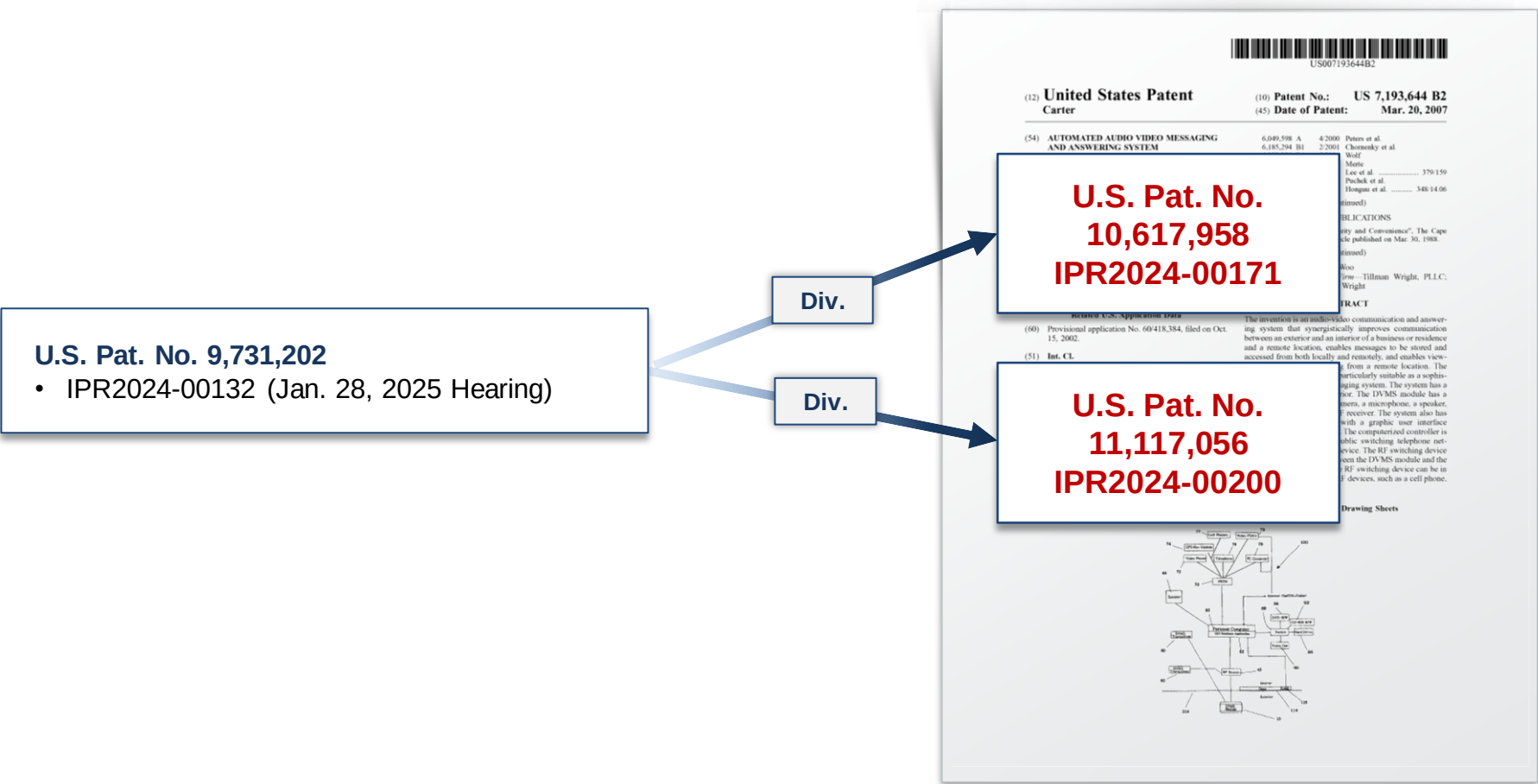
056 Patent at Abstract; 056 Pet. 3

“Turning now to FIG. 2A, several items 210, 220, 225, 230, and 235 are shown within scene 200. In this example, virtually any of **these items may be changed by receiving updated content** on the mobile communication device. For instance, the **shirt 230 might be updated to include a logo** associated with third party X (as shown).”

056 Patent at 6:44-49; Fig. 2a; 056 Reply at 21



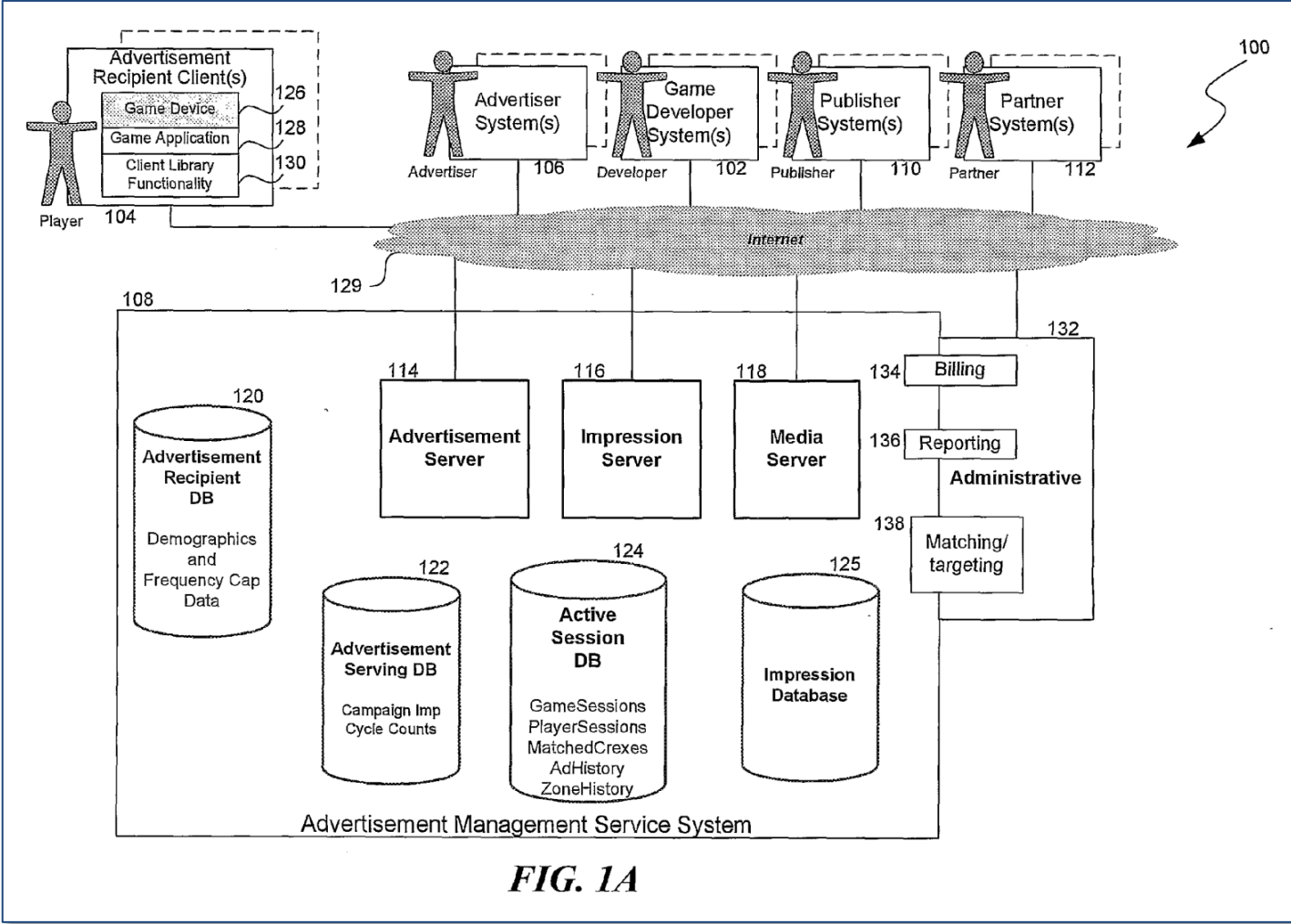
Patent Overview: Patent Family



Summary of Prior Art

Summary of Prior Art: Hays (Ex. 1005)

[0022] In some embodiments, components of the advertisement server may be used to track and manage large sets of available ad units from multiple game titles, forming a network of available advertisement spaces. Based on information associated with each of the available ad units (e.g., current game environment, game title genre, predicted player demographic information for current available ad unit, player geography, time of day, etc.), the advertisement server may then (through matching and optimization) distribute and deliver targeted advertisements to players' gaming devices, where the advertisements may be integrated into the relevant game areas in real time. For example, the multiple games that comprise the network of available advertisement spaces can be divided by genre such as sports titles (and even further by specific sport), children's titles, racing titles, etc. Accordingly, advertisers can target the delivery of their advertisement campaign specifically to a sub-channel as that sub-channel relates to their campaign. Accordingly, advertisers can target the delivery of their advertisement campaign specifically to a sub-channel as that sub-channel relates to their campaign 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). This targeting may include the game devices of game players involved in multiplayer games (who may all see the same advertisement simultaneously).



Summary of Prior Art: Hays (Ex. 1005)

[0030] In general, the advertisement server 114 may select advertisements based upon a variety of factors, including location, time of day, game player demographics, game play data, etc. The advertisement server 114 may use information retrieved from the advertisement serving database 122, such as “flight” information that describes the time frame in which any particular advertisement or advertisement campaign is set to be presented in games played during that time frame. For example, an advertisement campaign may include one or more advertisements, along with related targeting or presentation parameters specified for flight during a specified date range. Advertisement campaigns may be grouped for logical structure and aggregate reporting. The advertisement server 114 may also retrieve records from the advertisement recipient database 120 (e.g., demographic and login information for specific players) to select appropriate advertisements to serve to current available ad units that the game player will see in the video game. Game player demographic information may be extracted from the advertisement recipient database 120 upon starting a gaming session. Game play data may also be relayed to the advertisement server 114 and may be used to determine ad delivery (e.g. a Domino’s campaign that runs once gamers have played a single game session for over 45 minutes—research has shown that this leads to more pizza purchases). This process facilitates selection of the advertisements that the game player will see. In some embodiments, the publisher system 110 may request specific demographic information from the advertisement recipient database 120, including information specific to their game products/titles.

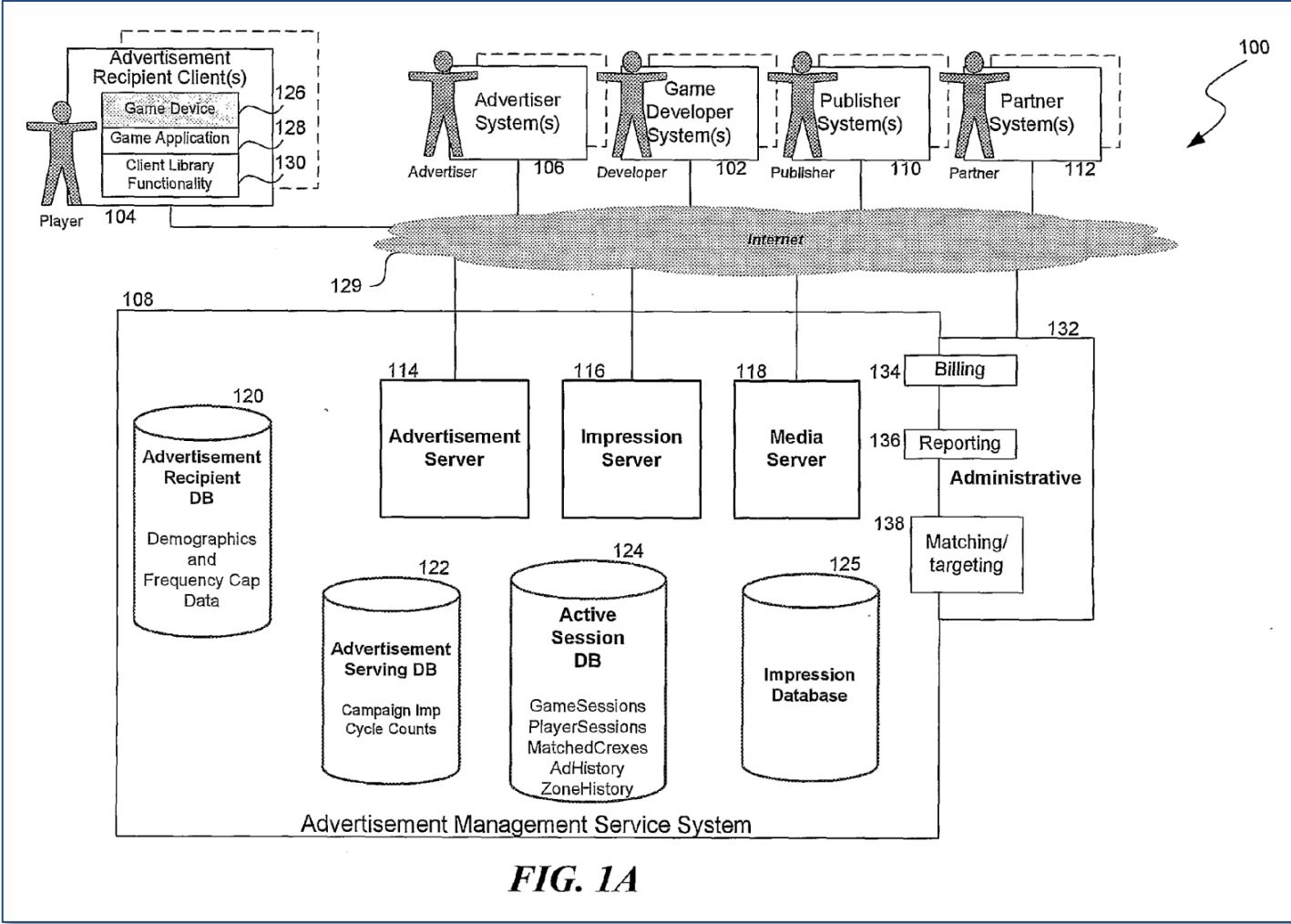
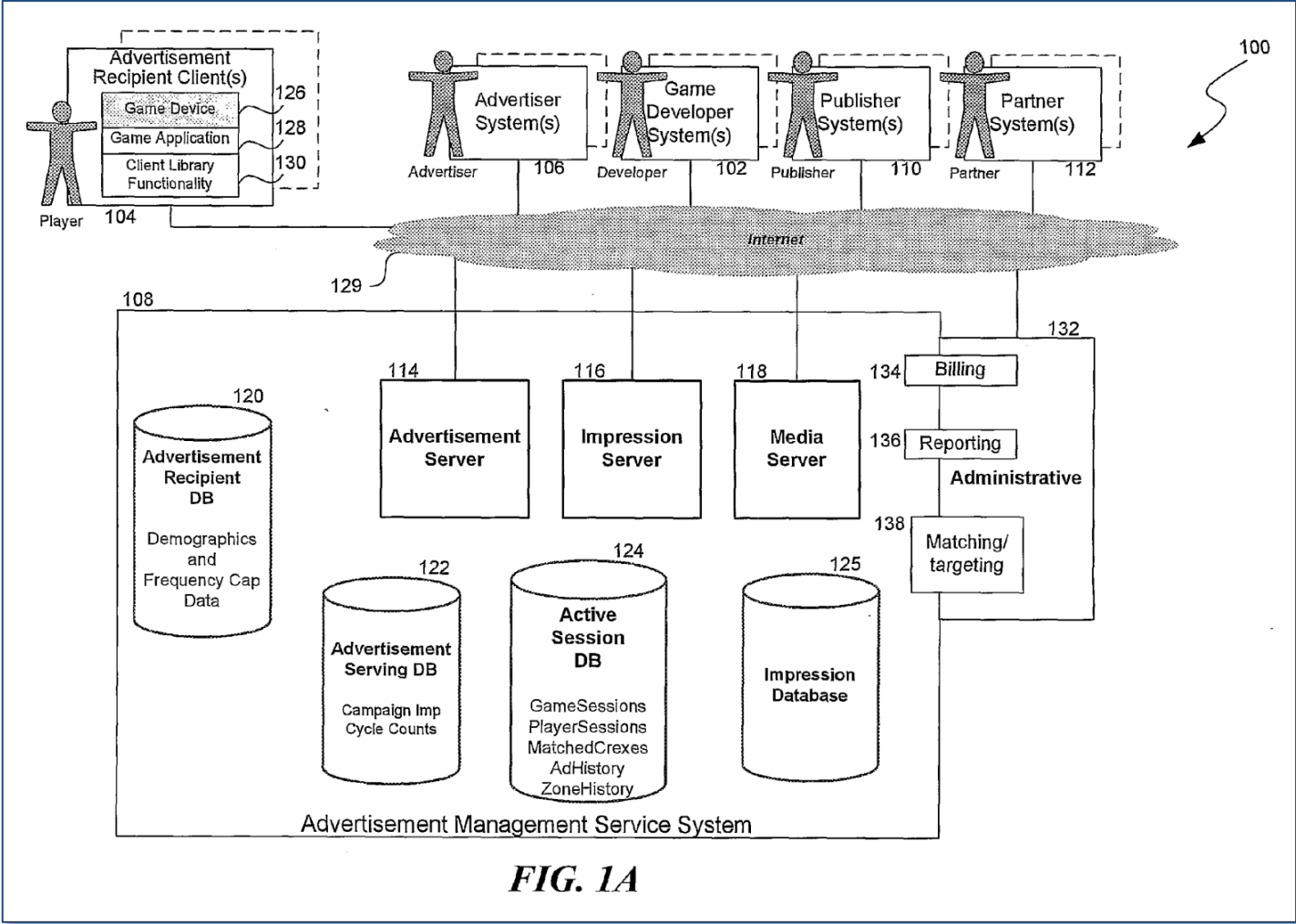


FIG. 1A

Summary of Prior Art: Hays (Ex. 1005)

“The 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. 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.”



Summary of Prior Art: Hays (Ex. 1005)

[0044] Optionally, advertising can be further targeted based on specific demographic characteristics of a game player. This targeting is specified within the advertisement serving database 122 and used to compare against data retrieved from a client data storage 260 by the advertising matching and weighting system 220. The client data storage 260 contains demographic information regarding a specific game player. This information may be collected from various sources, both internal and external to the advertisement management service system 108. For example, it may contain demographic information about a game player collected via the use of an IP address, including information tracked by the advertisement management service system 108 and/or information purchased or traded from other data collection sources (e.g., Internet service providers, data mining companies, online retailers, etc.). Aside from general demographics (e.g., age, sex, geographic location, hardware software platforms, etc.) examples of such data include data about purchasing habits of a game player, information about web sites that the game player visits, information about purchasing habits of the game player, information, etc.

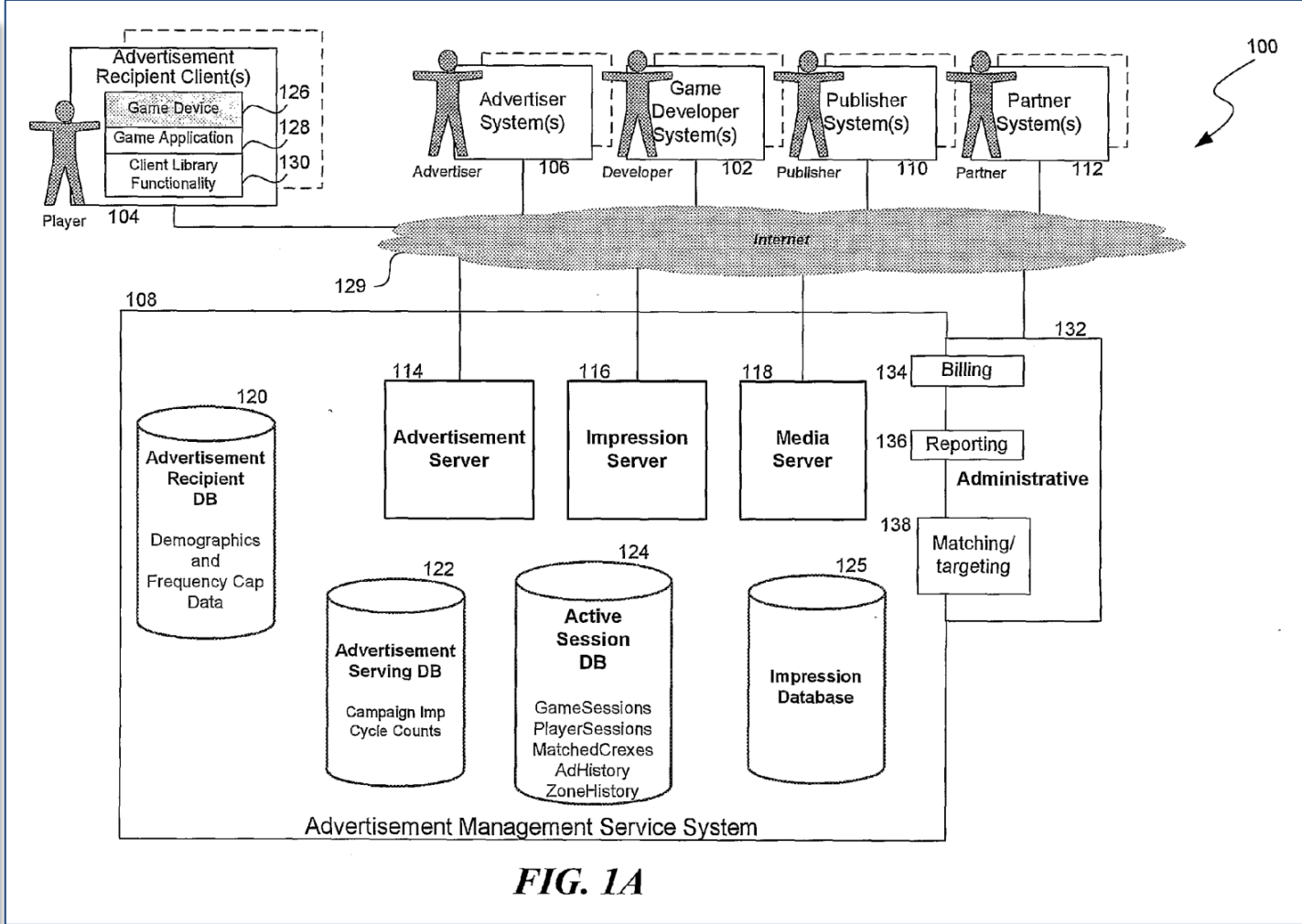


FIG. 1A

Summary of Prior Art: Hays (Ex. 1005)

“In some embodiments, advertisers use insertion orders to contract with the advertisement management service to place advertisements within a game, a game zone, or specific available ad unit for a defined period of time and view frequency. For example, a company may request its logo to be placed on any panel trucks in Zone 7 of the game “Driving Frenzy” (a fictional game) for the next three weeks but no more than three times per game session for a total of 1 million impressions.”

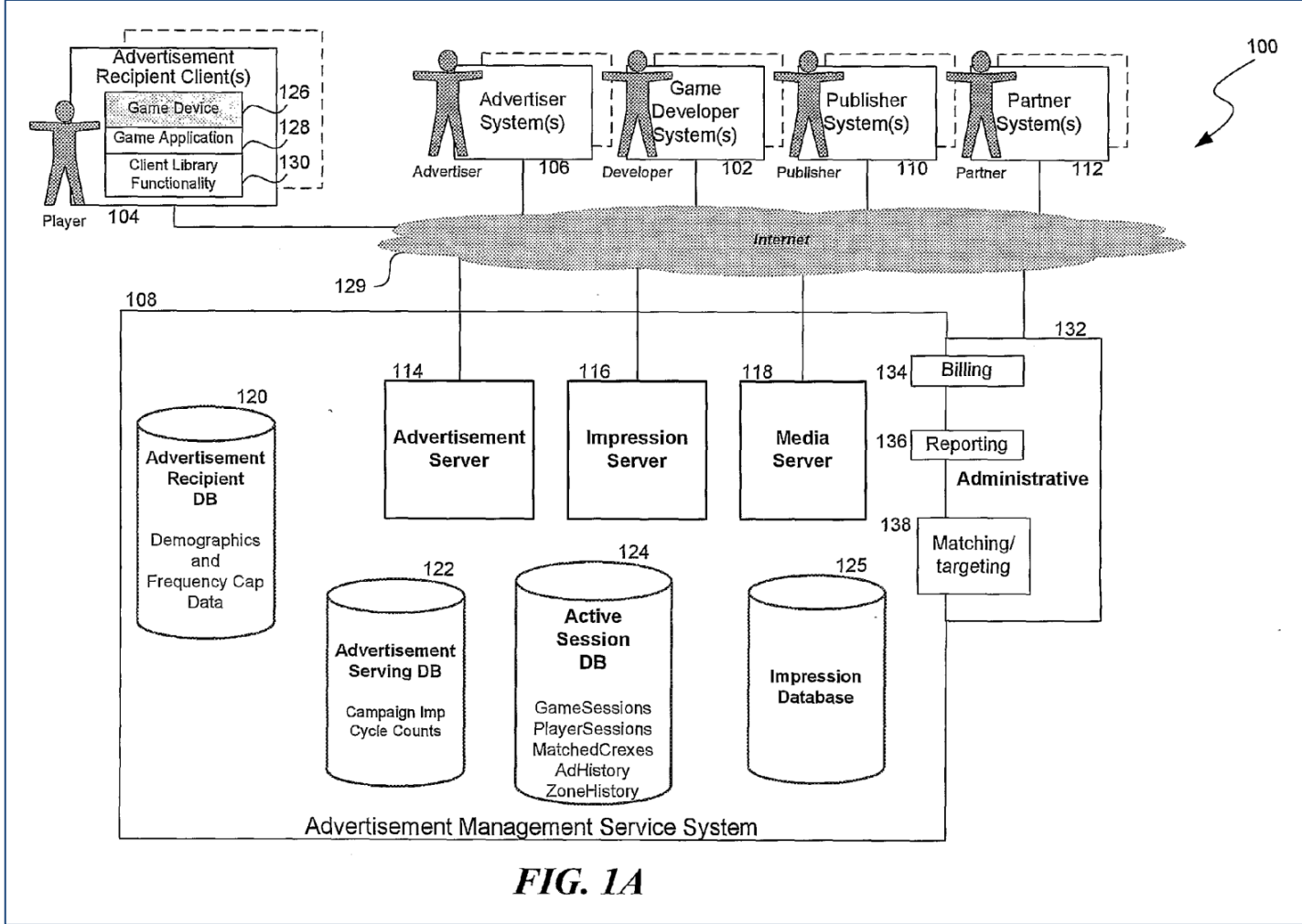


FIG. 1A

Summary of Prior Art: Hays (Ex. 1005)

- Hays:

“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.) without being limited to delivering their campaign to only a single specific game title. In some embodiments, the advertisement delivery scheme aggregates an audience across multiple video games and platforms (PC, console, mobile, etc.) and can deliver advertisements to that audience by advertiser request.”

Ex. 1005 (Hays) at ¶17; 056 Pet. and 13

“For example, the multiple games that comprise the network of available advertisement spaces can be divided by genre such as sports titles (and even further by specific sport), children's titles, racing titles, etc. ... Accordingly, advertisers can target the delivery of their advertisement campaign specifically to a sub-channel as that sub-channel relates to their campaign 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 (Hays) at ¶22; 056 Pet. at 20

Summary of Prior Art: Hays (Ex. 1005)

- Hays identifies which ad to send to a client using a weighting system:

“The advertising matching and weighting system 220 processes the request and produces a set of one or more matched advertisements to be displayed for each available ad unit, specified within the client's request.”

Ex. 1005 (Hays) at ¶40; 056 Pet. at 24

“The advertising matching and weighting system 220 may calculate the weight of each advertisement based on several factors including ... the specific client type from the advertisement recipient database 120. 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. “

Ex. 1005 (Hays) at ¶43; 056 Pet. at 24

“[T]he advertisement management service system may send bots or electronic agents into the game as advertising units or real characters in the game, which **advertise or promote a product** (e.g., a game character may move around a screen **holding a can of Pepsi** and ask player if they would like a drink).”

Ex. 1005 (Hays) at ¶79; 056 Pet. at 9

Summary of Prior Art: Levkovitz (Ex. 1008)

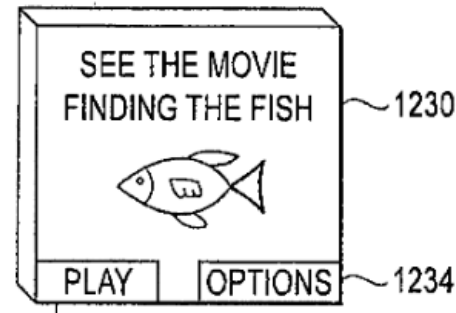
- Levkovitz:

“[G]ames for mobile phones, may be configured or adapted to include or embed a content client The content client may periodically connect to a content server or ad server and request content. The ad server may selectively serve content items to the content client, based on parameters related to the mobile phone, e.g., manufacturer identifier ...”

Ex. 1008 (Levkovitz) at ¶16; 056 Pet. at 11

“For example, the user may complete a level in the game, and the first advertisement may be presented, as indicated at box 1220. Optionally, the first advertisement may occupy substantially the full-screen of the wireless communication device.”

Ex. 1008 (Levkovitz) at ¶320; 056 Pet. at 12



Summary of Prior Art: Choi (Ex. 1006)

- Choi:

“Methods and systems for managing distribution and retrieval of data (for example advertising content and viewing statistics) and insertion of control logic (for example display of advertising content) into pre-existing mobile applications.”

Ex. 1006 (Choi) at Abstract; 056 Pet. at 10

“Effective ad targeting is an important function, since poorly targeted ads annoy users and decrease application usage. Ad targeting depends on collection of user demographic and contextual information. ... The carrier and typically the application distributor also know the PII as well as other user demographic information.”

Ex. 1006 (Choi) at ¶84; 056 Pet. at 10

Summary of Prior Art: Chu (Ex. 1007)

- Chu:

“[A]n online game advertising system provides ... interactive advertisements, sponsorships, and placements that appear within an online video game as part of the game experience or during idle load, wait, and pause screens. For example, in a race car game, when a driver pulls in for a pit stop, the engine oil brand that the game player may choose may be defined as locations for advertisements or product placements for real life engine oils and game publishers and advertisers may manage what specific advertisements to place in these locations.”

Ex. 1007 (Chu) at Abstract; 056 Pet. at 10

“An AdListing data structure contains Ad elements (525, 625) which in turn contain attributes and elements such as id, name, description, width, height, asset URL, etc. that describe an advertisement within the specified ad campaign. A Location object (530, 630) represents the location within a game at which advertisements are to appear and contains attributes and elements such as ID, name, and description.”

Ex. 1007 (Chu) at 14:20-15:5; 056 Pet. 11

056 Ground 1, 958 Ground 1:

**Hays discloses “pre-selecting” message “based on” factors
(056 Claim 1)**

Hays discloses “pre-selected” advertising (958 Claim 1)

Hays discloses “pre-selecting” advertisement

- **Board’s proposed construction:**
 - “[A] message that is selected any time before sending would be a ‘pre-selected’ message.” (056 ID at 14)
- **PO’s proposed construction** requires that “pre-select[ing]” advertisement / content:
 - Is distinct from “real-time selection” of advertisements (056 POR at 11)
 - “A message identified [*i.e.* preselection] based on the claimed factors and sent” could also be “selected and sent” (056 POR at 11)
- PO is **incorrect:** Hays ***expressly*** discloses “pre-selecting”:
 - Hays describes ads categorized and stored in, for example, sub-channels (pre-selecting) according to demographics
 - Hays also discloses that ads are stored and organized (pre-selected) according to “unique client identifier,” which includes the device type
 - PO repeats post-institution the ***same*** arguments it raised in the POPR, which the Board correctly noted did not address the Petitions’ mapping

Hays discloses “pre-selecting” advertisement

- Hays *pre-selects*:

“For example, the multiple games that comprise the network of available advertisement spaces can be **divided by genre** such as sports titles (and even further by specific sport), children's titles, racing titles, etc. ... Accordingly, advertisers can **target the delivery of their advertisement campaign specifically to a sub-channel** as that sub-channel relates to their campaign or **may subtarget by time of day ... or by game play date ...**”

Ex. 1005 (Hays) at ¶22; 056 Pet. at 20

- Dr. Zagal:

“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 (Zagal Decl.) at ¶89; 056 Pet. at 13

- *After* pre-selection, Hay’s weighting system transmits ad:

“The advertising matching and weighting system 220 then selects one or more advertisements from the weighted advertisement set”

Ex. 1005 (Hays) at ¶43; 056 Pet. at 17

Hays discloses “pre-selecting” advertisement

- Hays *pre-selects*:

“Based on information associated with each of the available ad units (e.g., current game environment, game title genre, predicted player **demographic information** for current available ad unit, player geography, time of day, etc.) ... For example, the multiple games that comprise the network of available advertisement spaces can be **divided by genre** such as sports titles (and even further by specific sport), children's titles, racing titles, etc. ... Accordingly, advertisers can **target the delivery of their advertisement campaign specifically to a sub-channel** as that sub-channel relates to their campaign or may subtarget by time of day ... or by game play date ...”

“Optionally, advertising can be further targeted based on specific demographic characteristics of a game player. This targeting is specified within the advertisement serving database 122 and used to compare against data retrieved from a client data storage 260 by the advertising matching and weighting system 220. The client data storage 260 contains demographic information regarding a specific game player. This information may be collected from various sources, both internal and external to the advertisement management service system 108. For example, it may contain demographic information about a game player collected via the use of an IP address, including information tracked by the advertisement management service system 108 and/or information purchased or traded from other data collection sources (e.g., Internet service providers, data mining companies, online retailers, etc.).”

Ex. 1005 (Hays) at ¶¶22, 40; 056 Pet. at 20

Hays discloses “pre-selecting” advertisement

- Hays also describes that ads are categorized by being ***specifically approved*** (i.e. pre-selected; compatibility check):

“The 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. 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.**”

Ex. 1005 (Hays) at ¶42; 056 Reply at 5

- Approving ads based on device type is exactly what the patents disclose:

“The initial message may be pre-selected based upon at least one of the factors including a type of the mobile communication device”

056 Patent at 10:36-38; 056 Reply at 5

Hays discloses “pre-selecting” advertisement

- Hays’s advertising server also categorizes ads by “unique client identifier” (*pre-selected based on device type*):

“A set of advertising for each request may be extracted from the advertisement serving database 122 based on data retrieved from a advertisement recipient database 120 keyed upon the unique client identifier.”

Ex. 1005 (Hays) at ¶41; 056 Pet. at 18

“This request contains a data structure that includes a unique identifier to indicate the client type”

Ex. 1005 (Hays) at ¶40; 056 Pet. at 20

- PO does not address this argument

Hays discloses “pre-selecting” advertisement

- Hays’s disclosure is exactly the same as the 056/958’s pre-selection:

“In the example of FIG. 1, updated content for a particular mobile communications device is stored on a data storage medium 130 as part of a group of pre-selected content for the mobile communications device. In this example, the data storage medium 130 is computer-readable. Potential data storage mediums include a hard drive, memory (such as RAM), and other storage devices (e.g., flash memory, a USB drive, compact disk, DVD, tape, or other media). The data storage medium may be implemented by one or more distinct storage mediums. In some embodiments, the updated content may be organized or indexed by a database of pre-selected content. The storage medium 130 may be a part of server 120 in some embodiments.”

056 Patent at 5:45-57; 056 Reply at 5

“The pre-selected content may be stored on a storage medium accessible by the server. Updated content may be chosen from pre-selected content based on at least one of the factors including a type of the mobile communication device, a telecommunication service, a subscription associated with the mobile communication device, and a service provider of the telecommunication service.”

056 Patent at 11:34-40; 056 Reply at 6

Hays discloses “pre-selecting” advertisement

- PO misinterprets Petitioner’s position—for pre-selecting, the Petition relies on Hay’s *categorization of ads* in the ad server, *not* on its advertising weighting system
- PO’s argument was already *rejected* in the ID:

“Patent Owner argues that Petitioner ‘appears to conflate selecting the advertisement with that advertisement being preselected.’ Prelim. Resp. 37. On this record, we disagree with Patent Owner because Petitioner identifies separate disclosures in Hays for the ‘pre-selected’ and ‘check[ing]’ recitations of the claims, as discussed above.”

Paper 9 (958 ID) at 12

Hays discloses pre-selecting a message “based on” factors (056 patent)

- **056 patent**: PO argues “based-on” must be narrowed by **four** limitations:
 - Cannot be related to the data that is transmitted (056 POR at 16)
 - Must check that ad is compatible with the user’s device (056 POR at 17)
 - Must check that ad is compatible with service provider (056 POR at 17)
 - Cannot simply compare weights and rank advertisements, must directly use the factors when selecting an advertisement (056 POR at 18)
- PO’s construction is **incorrect**:
 - PO does not argue “ordinary meaning”
 - PO does not argue lexicography or disclaimer
- PO’s construction is **inconsistent with** the claim language and specification
- PO did not pursue this argument in Sur-Reply

Hays discloses pre-selecting a message “based on” factors (056 patent)

- PO’s “compatibility” requirements are inconsistent with the claim language and specification

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

056 patent at cl. 1

“The initial message may be pre-selected based upon at least one of the factors including a type of the mobile communication device, a telecommunication service, a subscription associated with the mobile communication device, and a service provider of the telecommunication service. For example, a particular service provider may wish to provide an initial message that thanks the user of the mobile communication device for using their services.”

056 Patent at 10:36-43; 056 Reply at 6-7

Hays discloses pre-selecting a message “based on” factors (056 patent)

- PO’s limitation requiring factors related to “receiving” data is inconsistent with the specification

“The initial message may be pre-selected based upon at least one of the factors including a type of the mobile communication device, a telecommunication service, a subscription associated with the mobile communication device, and a service provider of the telecommunication service. For example, a particular service provider may wish to provide an initial message that thanks the user of the mobile communication device for using their services.”

056 Patent at 10:36-43; 056 Reply at 6-7

- PO’s Sur-Reply does not address any of these claim construction issues
- Hays discloses checking for compatibility

056 Ground 1, 958 Ground 1:
Hays discloses advertising “for use in a video game”
(056 Claim 9, 958 Claim 1)

Hays discloses advertising “for use in a video game”

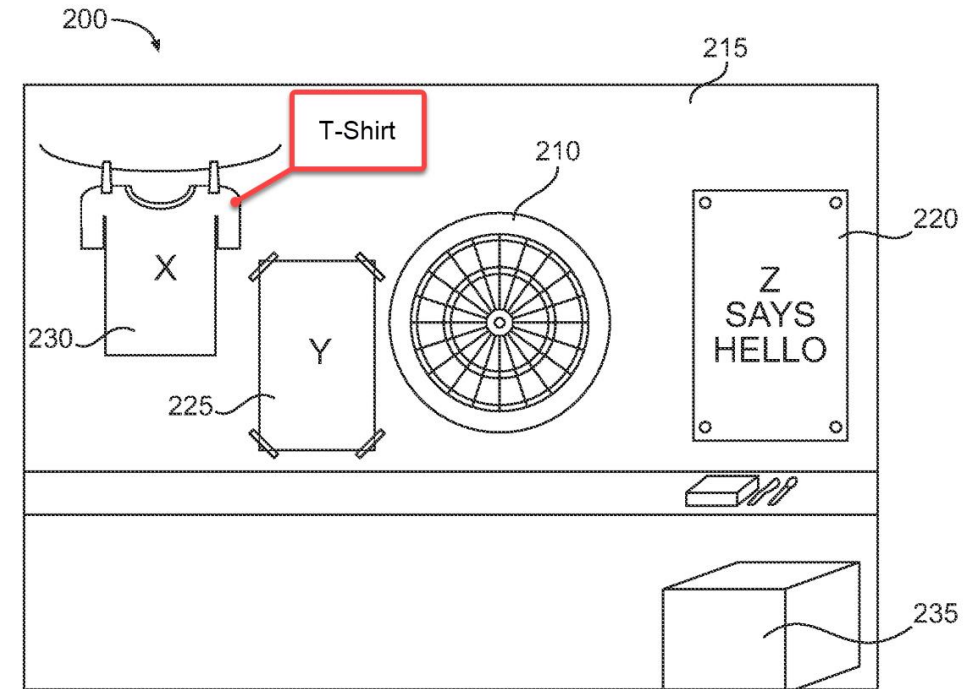
- PO argues that content “for use” must be narrowed by **seven** limitations:
 - Cannot merely be “skins” that are displayed (056 POR at 19)
 - Must affect game play (056 POR at 19)
 - Must alter game functionality (056 POR at 19)
 - Must relate to in-game purchases (056 POR at 21)
 - User must experience differences in the game (056 POR at 22)
 - Cannot merely be content that is displayed or accessed by code (958 POR at 2)
 - Must allow interaction by the user (056 Sur-Reply at 7)
- PO’s construction is **incorrect**:
 - PO does not argue “ordinary meaning”
 - PO does not argue lexicography or disclaimer
- PO’s construction is **inconsistent with** the claim language and specification

Hays discloses advertising “for use in a video game”

- PO’s requirements that content cannot just be skins, and must affect gameplay, are inconsistent with the specification
- Specification discloses ad on a t-shirt which does not affect game play or provide user interaction:

“In this example, virtually any of these items may be changed by receiving updated content on the mobile communication device. For instance, the shirt 230 might be updated to include a logo associated with third party X (as shown). The poster 225 might advertise an upcoming movie for third party Y, and chalk board 220 may contain a handwritten advertisement for third party Z (as shown).”

Ex. 1001 (958 patent) at 6:45-49, Fig. 2A; 056 Reply at 7-8



Hays discloses advertising “for use in a video game”

- PO’s expert agrees that PO’s definition of “for use” is inconsistent with specification:

“For instance, the shirt 230 might be updated to include a logo associated with third party X (as shown).”

Ex. 1001 (958 patent) at 6:45-49, Fig. 2A; 056 Reply at 7-8

“Q. [B]ased on your understanding of the claims, updating the tshirt to include a logo associated with a third party, that would not be updated content that is for use or usable in the game?

A. ... [J]ust having something on a shirt, and if we stop there and we don’t give any additional information, that is just content but that doesn’t disclose for use yet.”

Ex. 1020, 26:3-18; 056 Reply at 8

Hays discloses advertising “for use in a video game”

- Hays discloses *interactive* advertisements that *affect gameplay and game functionality*:

“Some available ad units may be **interactive** within the game (e.g., a **game character eating a brand name energy bar to boost her power in the game**, a brand-related “mini game” presented between levels, a click-through advertisement, etc.)”

Ex. 1005 (Hays) at ¶19; 056 Reply at 8

“[T]he advertisement management service system may send bots or electronic agents into the game as advertising units or **real characters in the game**, which advertise or promote a product (e.g., a game character may move around a screen **holding a can of Pepsi and ask player if they would like a drink**).”

Ex. 1005 (Hays) at ¶79; 056 Reply at 8

“[T]he advertisement delivery scheme and associated facility present advertisements ... on pre-designated geometry within the game, such as billboards, storefront signs, panel trucks, Jumbotron screens in a sports stadium, posters on walls, T-shirts on a game character, **items used by game characters (e.g., a brand name soft drink or energy bar)**”

Ex. 1005 (Hays) at ¶18; 056 Reply at 11

Hays discloses advertising “for use in a video game”

- PO: Prosecution overcame Gatto’s teachings of hyperlinks, which are similar to skins
- Applicant distinguished Gatto because its hyperlinks opened a separate application to present content **outside** the alleged video game

(1004). Nothing in *Gatto* discloses that the screen saver would be usable inside and as part of the email ticket itself (i.e., the alleged “video game”). Rather, based on the typical operation of screen savers, a person of ordinary skill would readily understand that the screen saver would be activated separately from and outside of the email ticket based on a period of inactivity at the user’s device. Similarly, nothing in *Gatto* discloses that any information downloaded in response to selecting the “About the Company,” “News at Coke,” or “Coca-Cola Store” hyperlinks would even be presented inside or as part of the email ticket itself, as opposed to within a separate application (e.g., a web browser). Therefore, *Gatto* also fails to disclose any updated “promotional items” or content that would be “usable in” the email ticket or a “video game” itself, as opposed to a separate application program. As *Gatto* does not disclose these claim elements, it cannot anticipate.

Ex. 2002 (202 File History) at 142-43;
056 POR at 23

056 Ground 1:

**Hays discloses “identifying content” based on factors (056
Claim 4)**

Hays discloses “identifying content” based on factors

- Hays identifies ads to transmit using a weighting system that uses device type:

“The advertising matching and weighting system 220 may calculate the weight of each advertisement based on several factors including campaign goal and completion data from the advertisement serving database 122 and information regarding the specific client type from the advertisement recipient database 120.”

Ex. 1005 (Hays) at ¶43; 056 Pet. at 24

- PO **misstates** the Petition:
 - PO argues Petition’s mapping is incorrect because both “identification” and “pre-selection” are mapped to Hay’s “advertising and weighting system.”
 - The Petition maps Hays’s weighting system to the **identification** limitation,
 - The Petition **does not map** weighting to the “pre-selection” limitation (056 POR at 23-24).

Hays discloses “identifying content” based on factors

- Hays also identifies ads to transmit using a weighting system that uses GPS location:

“[T]he advertisement server 114 may select advertisements based upon a variety of factors, including **location**, time of day, game player demographics, game play data, etc.”

Ex. 1005 (Hays) at ¶30; 056 Reply at 10

“Optionally, advertising can be further targeted based on specific demographic characteristics of a game player ... (e.g., age, sex, geographic location, hardware software platforms, etc.).”

Ex. 1005 (Hays) at ¶44; 056 Reply at 10

- PO does not dispute this disclosure

056 Ground 1, 958 Ground 1:

**Hays discloses “providing an in-game placement location”
(056 Claim 5, 958 Claim 3)**

Hays discloses sending “in-game placement location”

- PO argues that “in-game placement location” must be narrowed by **three** limitations:
 - Cannot be an indication of which game asset, but their specific location (056 POR at 25)
 - Must be an X/Y coordinate (056 Sur-Reply at 16)
 - Can’t be “standardized” (056 Sur-Reply at 9-10)
- PO’s construction is **incorrect**:
 - PO does not argue “ordinary meaning”
 - PO does not argue lexicography or disclaimer
- PO’s construction is **inconsistent with** the claim language and specification (reads out embodiments)

Hays discloses sending “in-game placement location”

- PO’s “specific,” “XY coordinate” requirements read out embodiments from the 958/056 specification that only require designating an object, not a specific x-y coordinate:

“For example, turning back to FIG. 2A, a first location may be where the shirt 230 is hanging, a second location may be where poster 225 is positioned, a third location may be where the dart board 210 is placed, and so on. In that embodiment, the coordinates need only identify the pre-defined location (rather than positions along the axes) and the mobile communication device may display the updated content at that location.”

056 Patent at 12:28-36; 056 Reply at 11

“[T]he [‘056/’958 patent] provide[s] examples of location that could be ... a location that still be in relation to an object, but it’s still a location where something is hanging, where something is positioned.”

Ex. 1020 (Akl Tr.) at 31:21-32:1; 056 Reply at 11

Hays discloses sending “in-game placement location”

- Hay’s “ad units” are described identically to the 056/958 patents’ “locations”:

“a first location may be where the shirt 230 is hanging, a second location may be where poster 225 is positioned, a third location may be where the dart board 210 is placed, and so on. In that embodiment, the coordinates need only identify the pre-defined location (rather than positions along the axes) . . .”

056 Patent at 12:28-36; 056 Reply at 11

“[T]he advertisement delivery scheme and associated facility present advertisements as texture maps or other graphical displays (e.g., animations, video, etc.) on pre-designated geometry within the game, such as billboards, storefront signs, panel trucks, Jumbotron screens in a sports stadium, posters on walls, T-shirts on a game character, items used by game characters (e.g., a brand name soft drink or energy bar), and so on. Each of these spaces may be termed an “available ad unit” or “inventory element.”

Ex. 1005 (Hays) at ¶18; 056 Reply at 11

- Dr. Akl agreed designating an object can be a “location”:

“[T]he [‘056/’958 patent] provide[s] examples of location that could be ... a location that still be in relation to an object, but it’s still a location where something is hanging, where something is positioned.”

Ex. 1020 (Akl Tr.) at 31:21-32:1; 056 Reply at 11

Hays discloses sending “in-game placement location”

- Hays discloses the server **providing** the ad unit to the device:

“In some embodiments, the **advertisement server** 114 may fulfill requests received from the advertisement recipient client 104 for advertisements and associated media, including supporting advertisement requests from the advertisement recipient client 104. This may include handling initial connections, **providing requested lists of advertisements for specific available ad units**, serving media, etc.”

Ex. 1005 (Hays) at ¶29; 056 Pet. at 25

“When the server provides the specific brand name of the energy bar to be displayed along with other advertisements that were selected, the client device needs to know which ad unit that is associated with the provided brand name of the energy bar. Thus, **the server must have sent with the advertisement the specific ad unit** that the advertisement is to be used with.”

Ex. 1003 (Zagal Decl.) at ¶121; 056 Pet. at 25

Hays discloses sending “in-game placement location”

- Hays discloses the server *providing* the ad unit to the device:

“In some embodiments, advertisers use **insertion orders** to contract with the advertisement management service to place advertisements within a game, a game zone, or specific available ad unit for a defined period of time and view frequency. For example, a company may request its **logo to be placed on any panel trucks in Zone 7** of the game “Driving Frenzy” (a fictional game) for the next three weeks but no more than three times per game session for a total of 1 million impressions.”

Ex. 1005 (Hays) at ¶29; 056 Pet. at 25

“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. the claimed “in-game placement location”) the advertiser chose for its advertisement.”

Ex. 1003 (Zagal Decl.) at ¶122; 056 Pet. at 26

Hays discloses sending “in-game placement location”

- PO: Hays’s ad units are “standardized” (Sur-Reply 9)
- Hays’s “standardized” ad units refer to the **type** of ad unit an advertiser can **select**:

“In some embodiments, advertisement opportunities may be offered to advertisers based on standardized available ad units, which may include, for example signs (e.g., a billboard, poster, or other form of static sign regardless of its location), structure (e.g., an image mapped onto a building, such as a branded fast food storefront (McDonald's, Dunkin' Donuts, Baskin Robbins, Dominos Pizza), retail store (Gap, Target, Foot Locker, Blockbuster), a bank (Citibank, Chase), or other location (movie theatre, etc.)), logos (e.g., a logo placed on clothing worn by game characters (T-shirts, hats, sports gear) or on objects interacted within the game context (logo on car, on skateboard, on computer monitor, or on a cell phone used by character) or other smaller environments where branding is more appropriate), packaging (e.g., packaging for products within the game such as cans, wrappers, bags, etc. (for example, a pizza box, vending machine, etc.)), ...”

Ex. 1005 (Hays) at ¶73; 056 Reply at 11

Hays discloses sending “in-game placement location”

- Hays renders obvious the server *providing* the ad unit to the device:

“[I]t is my opinion that a POSITA would have also found it obvious to send the specific ad unit (i.e. the claimed “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. A POSITA would have reasonably expected such a combination to succeed because the modification would simply **include 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). Providing additional information with the server response would be a straightforward change well-within the capabilities of a POSITA.”

Ex. 1003 (Zagal Decl.) at ¶123; 056 Pet. at 26

- PO argues Dr. Zagal did not address sending the location “as part of the updated content” (958 Sur-Reply at 15) (not applicable to 056 Patent’s Claim 5/13)
- But Dr. Zagal testified it was obvious to send “the specific ad unit [*i.e.* claimed location] **when sending an advertisement**” (Ex. 1003 at ¶123)

056 Ground 1, 958 Ground 1:

Hays discloses “track[ing] the distribution of updated content” (056 Claim 7, 958 Claim 7)

Hays discloses “track[ing] the distribution of updated content”

- PO argues Hays does not “track” the distribution of content because:
 - Hays does not track all data, only data uploaded for a session (056 POR at 26-27)
 - Hays’ tracking of advertisement impressions only tracks presentation of ad (056 POR at 27)
- PO misreads Hays:
 - Hays expressly discloses tracking **all** data uploaded to a user, and that a session corresponds with a user connecting to the game
 - Hays’ tracking of advertisement impressions requires tracking which advertisements were uploaded

Hays discloses “track[ing] the distribution of updated content”

- PO: Hays does not track all data, only data uploaded for a session
- Hays expressly tracks **all** communications

“[T]he 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.”

- A session is **any time** the user is connected to the game

Ex. 1005 (Hays) at ¶38; 056 Reply at 12

“[T]he advertisement recipient client 104 begins by establishing or joining a session with the advertisement server 114. ... When a game player specifically and actively leaves a session, the advertisement recipient client sends a message indicating the game player left”

Ex. 1005 (Hays) at ¶¶38-39; 056 Reply at 12-13

- PO does not identify any data in Hays that is uploaded outside of a session

Hays discloses “track[ing] the distribution of updated content”

- Hays tracks how often an advertisement is presented

“For example, the advertising matching and weighting system 220 may use this data along with impression data, also stored in the active session database 124, to allow 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). Frequency caps may prevent a gamer from being presented with advertisements from the same campaign in excess of a number of times specified within the campaign data.

Ex. 1005 (Hays) at ¶45; 056 Pet. at 28

“[I]n order to implement “frequency caps,” the system must know how many times a particular advertisement has been provided to the mobile device, which indicates that system tracks what has been uploaded to the mobile communication device.”

Ex. 1003 (Zagal Decl.) at ¶130; 056 Pet. at 28

Hays discloses “track[ing] the distribution of updated content”

- PO: Hays’ tracking of advertisement impressions only tracks user’s reactions
- Hays’s advertisement impressions requires tracking which ads were uploaded

“[T]he advertisement delivery scheme ... may track, audit, and report on 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).”

Ex. 1005 (Hays) at ¶25; 056 Pet. at 28

“In order to track such information about advertisements, the system would also need to track which advertisements were uploaded to the mobile device.”

Ex. 1003 (Zagal Decl.) at ¶131; 056 Pet. at 28

056 Ground 1:

**Hays discloses “check[ing] for availability of bandwidth”
(056 Claim 8)**

Hays discloses “check[ing] for availability of bandwidth”

- Hays describes checking that the client is connected to the server before sending content, which is a determination of available bandwidth

“[A]dvertisements 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 (Hays) at ¶34; 056 Pet. at 34

- Hays also discloses that ads can be sent sporadically or periodically (instead of maintaining a constant connection)

“Communication between the advertisement server and the gaming device may be done sporadically, periodically, or by maintaining a constant connection between the appropriate components while the game is being played.

Ex. 1005 (Hays) at ¶21; 056 Pet. at 34

- Dr. Zagal testified a POSITA would have understood Hays to disclose checking for Bandwidth:

“A POSITA would have understood from this discussion that the server of Hays checks for the availability of bandwidth in order to download updated content to the mobile communication device, including check for the availability of a connection with the mobile device or the availability of unused bandwidth that would allow advertisements to be downloaded “in the background” without interfering with other tasks.”

Ex. 1003 (056 Zagal Decl.) at ¶133; 056 Pet. at 29

Hays-Choi renders obvious “check[ing] for availability of bandwidth”

- Choi discloses selecting an ad based on whether bandwidth is available

“The ad system of the present invention can, in at least some embodiments, 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. These capabilities criteria can include any characteristic of the target device environment that is available to the application into which the ad is to be served; these capabilities can include but are not limited to: screen size and color depth; number and type of screens, including internal and external (with respect to clamshell devices); device model; available storage; location capabilities such as GPS; media input capabilities (audio, still image, and video); media playback capabilities (audio and video); web browsing capabilities; processor speed; network transport capabilities (such as TCP vs WAP) and **speed (bandwidth and latency)**”

Ex. 1006 (Choi) at ¶89; 056 Pet. 39-40

- PO does not dispute that Choi discloses this limitation

056 Ground 2:

Hays-Choi renders obvious “pre-selecting” ads based on service provider (056 Claim 1)

Choi renders obvious pre-selecting “based on a service provider”

- PO argues Choi’s ad targeting is based on “demographic information” not the “service provider” (Sur-Reply 13-14)
- Choi chooses ads based on demographic information from identifying the service provider

“Effective ad targeting is an important function, since poorly targeted ads annoy users and decrease application usage. Ad targeting depends on collection of user demographic and contextual information.”

“Identification of a users' carrier implies a certain demographic. Carrier identity is typically known at application download time. An instrumented application can also communicate its carrier identity”

Ex. 1006 (Choi) at ¶¶83, 86; 056 Pet. at 37

Motivation to Combine Hays and Choi

- Dr. Zagal's testimony of motivation to combine:

“A POSITA would have been motivated to use Choi's teaching of requesting and using demographic 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. ... Thus, carrier information provides a simple way of making a rough determination about a user's demographic without impinging on privacy concerns.”

Ex. 1003 (Zagal Decl.) at ¶140; 056 Pet. at 33

“Thus, in my opinion, this combination is the application of a known technique (demographic information from the carrier) to a known device ready for improvement (Hays's system that uses location for targeted advertisements) to yield predictable results.”

Ex. 1003 (Zagal Decl.) at ¶141; 056 Pet. at 34

Motivation to Combine Hays and Choi

- PO: Choi and Hays already describe systems for targeting advertisements based on other factors (POR 29)
- Does not address Dr. Zagal's testimony that Choi fills in details for Hays

“A POSITA would further be motivated because Hays already discloses that its advertising system selects targeted advertising based on “predicted demographic information about the players.” Ex. 1005, ¶36. 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 (Zagal Decl.) at ¶141; 056 Pet. at 34

Motivation to Combine Hays and Choi

- PO: Choi does not explain how to use the collected information to provide a motivation
- Dr. Zagal clearly explained how to use Choi's information within the proposed combination

“In my opinion, a POSITA would have been motivated to combine Hays with Choi's teaching of “request[ing] demographic information from the carrier” of the mobile communication device to use in the selection of advertisements”

Ex. 1003 (Zagal Decl.) at ¶139; 056 Pet. at 33



“A given course of action often has simultaneous advantages and disadvantages, and this does not necessarily obviate motivation to combine.”

Allied Erecting & Dismantling Co. v. Genesis Attachments, LLC, 825 F.3d 1373, 1381 (Fed. Cir. 2016)

Motivation to Combine Hays and Choi

- PO: Hays is focused on sending ads to any kind of game, Choi is focused on a specific game (056 POR at 33-34)
- This distinction has no bearing on whether a POSITA would be motivated to use carrier information for in-game targeted advertising as Choi teaches



“[A] reference must be considered for everything it teaches by way of technology and is not limited to the particular invention it is describing and attempting to protect.”

Belden Inc. v. Berk-Tek LLC, 805 F.3d 1064, 1076 (Fed. Cir. 2015)

056 Ground 3, 958 Ground 2:
Hays-Chu renders obvious “in-game placement location”
(056 Claim 5, 958 Claim 3)

Chu renders obvious sending “in-game placement location”

- PO argues that “in-game placement location” must be narrowed by **three** limitations:
 - Cannot be an indication of which game asset, but their specific location (056 POR at 25)
 - Must be an X/Y coordinate (056 Sur-Reply at 16)
 - Can’t be “standardized” (056 Sur-Reply at 9-10)
- PO’s construction is **incorrect**:
 - PO does not argue “ordinary meaning”
 - PO does not argue lexicography or disclaimer
- PO’s construction is **inconsistent with** the claim language and specification (reads out embodiments)

Chu renders obvious sending “in-game placement location”

- Chu describes the server providing the location of where advertisements appear to the client

“[T]he present invention provides a unique method for online games to request advertising metadata and schedules that determine what advertisements are to display in specified locations within the game”

Ex. 1007, 14:20-14:26; 056 Pet. at 41

“In one embodiment, the present invention provides a unique method for receiving and posting messages and advertising assets. ... For example, FIG. 7 illustrates an XML format structure that may be utilized to send metadata [which includes] A Location object (530, 630) represents the location within a game at which advertisements are to appear and contains attributes and elements such as ID, name, and description.”

Ex. 1007 (Chu) 14:47-15:5; 056 Pet. at 41

```
530 - <Location>
      <ID>2147483647</ID>
      <Name>Engine Oil Pitstop</Name>
    </Location>
```

Ex. 1007 (Chu) at Fig. 7, 056 Pet. at 41

Chu renders obvious sending “in-game placement location”

- PO cites to Chu’s Figure 7 to support its position

```
<?xml version="1.0" encoding="UTF-8" ?>
500 - <CampaignListing xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
      xsi:noNamespaceSchemaLocation="CampaignListing.xsd">
510   - <Campaign>
        <ID>2147483647</ID>
520   - <AdListing interval="30">
        - <Ad>
            <ID>2147483647</ID>
            <Type>image</Type>
            <Width>200</Width>
            <Height>200</Height>
            <Media>/advertising/media/2147483647.jpg</Media>
525   - <Ad>
            <ID>2147483648</ID>
            <Type>video</Type>
            <Width>200</Width>
            <Height>200</Height>
            <Media>/advertising/media/2147483648.jpg</Media>
        - <Ad>
            <ID>2147483648</ID>
            <Type>image</Type>
            <Width>200</Width>
            <Height>200</Height>
            <Media>Penzoil engine go. Go with the best!</Media>
        </Ad>
        </AdListing>
530   - <Location>
            <ID>2147483647</ID>
            <Name>Engine Oil Pitstop</Name>
        </Location>
    </Campaign>
</CampaignListing>
```

Ex. 1007 (Chu) at Fig. 7; 056 Pet. at 41

Chu renders obvious sending “in-game placement location”

- PO argues Chu does not disclose that the location metadata is sent from the server to client
- Chu:

“[T]he present invention provides a unique method for online games to request advertising metadata and schedules that determine what advertisements are to display in specified locations within the game”

Ex. 1007, 14:20-14:26; 056 Pet. at 41

“In one embodiment, the present invention provides a unique method for receiving and posting messages and advertising assets. ... For example, FIG. 7 illustrates an XML format structure that may be utilized to send metadata ... A Location object (530, 630) represents the location within a game at which advertisements are to appear and contains attributes and elements such as ID, name, and description.”

Ex. 1007 (Chu) 14:47-15:5; 056 Pet. at 41

Motivation to Combine Hays and Chu

- Dr. Zagal's testimony regarding motivation to combine is unrebutted

“A POSITA would have been motivated to use Chu's teachings of the server providing to the client the specific in-game locations of advertisements because of the well-known benefits of being able to display advertisements at in-game locations. 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. Moreover, advertisements could be targeted to relevant in-game locations, such as displaying an advertisement for a soft drink in an in-game restaurant.

“[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. Thus, in my opinion, 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.”

Ex. 1003 (Zagal Decl.) at ¶¶164-65; 056 Pet. at 41-42

Motivation to Combine Hays and Chu

- PO: Dr. Zagal does not explain how Chu's client-based system would be implemented into Hays's server system
- Dr. Zagal explained how to use Chu's location metadata with Hays's system

“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. A POSITA would know how to include in-game locations when sending advertisement information from a server to a device.”

“[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. Thus, in my opinion, 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.”

Ex. 1003 (Zagal Decl.) at ¶¶165-66, 056 Pet. at 41-42

Motivation to Combine Hays and Chu

- PO: Hays is focused on sending ads to any kind of browser-based game, Chu is focused on a designing a specific game application (056 POR at 37-38)
- This distinction has no bearing on whether a POSITA would be motivated to use Chu's location metadata when sending Hays's advertisement



“[A] reference must be considered for everything it teaches by way of technology and is not limited to the particular invention it is describing and attempting to protect.”

Belden Inc. v. Berk-Tek LLC, 805 F.3d 1064, 1076 (Fed. Cir. 2015)

Motivation to Combine Hays and Chu

- PO: Hays's "ad units" are not fixed at a specific location, and so not suitable for receiving location data (056 POR at 38-39)
- This is contrary to Hays's disclosure:

"To enable this, an advertising matching and weighting system 220 associated with the advertisement server 114 may use the active session database 124 both to record the advertisements delivered to the advertisement recipient client within a session to first request an advertisement for **a specific location**"

Ex. 1005 (Hays) at ¶46; 056 Reply at 19

"[T]he advertisement delivery scheme and associated facility present advertisements as texture maps or other graphical displays (e.g., animations, video, etc.) on **pre-designated geometry within the game**, such as billboards, storefront signs, panel trucks, Jumbotron screens in a sports stadium, posters on walls, T-shirts on a game character, items used by game characters (e.g., a brand name soft drink or energy bar), and so on."

Ex. 1005 (Hays) at ¶29; 056 Pet. at 42

958 Ground 1:

**Hays discloses “pre-selected message” based on factors
(958 Claim 5)**

Hays discloses “pre-selected message” based on factors

- Claim 5 requires a “**message** relating to content” that is “pre-selected” based on one or more factors, including device type
- PO does not dispute that the “message” can be, but is not necessarily, the advertisement itself
- Hays describes a list of selected advertisements, as well as data associated with ads:

“This may include handling initial connections, providing requested lists of advertisements for specific available ad units, serving media, etc.”

Ex. 1005 (Hays) at ¶29; 958 Pet. at 24

“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) may be handled by a media server that functions as an edge server”

Ex. 1005 (Hays) at ¶41; 958 Pet. at 24

Hays discloses “pre-selected message” based on factors

- Hays describes that its ads are pre-selected based on device type:

“For example, the multiple games that comprise the network of available advertisement spaces can be divided by genre such as sports titles (and even further by specific sport), children's titles, racing titles, etc. ... Accordingly, advertisers can target the delivery of their advertisement campaign specifically to a sub-channel as that sub-channel relates to their campaign or may subtarget by time of day ... or by game play date ...”

Ex. 1005 (Hays) at ¶22; 958 Reply at 11

“The 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. 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.”

Ex. 1005 (Hays) at ¶42; 958 Reply at 11

- Thus the data associated with the ads are also pre-selected based on device type

Hays discloses “pre-selected message” based on factors

- Hays’ weighting system also uses device type:

“The advertising matching and weighting system 220 may calculate the weight of each advertisement based on several factors including campaign goal and completion data from the advertisement serving database 122 and information regarding the specific client type from the advertisement recipient database 120.”

Ex. 1005 (Hays) at ¶43; 056 Pet. at 27-28

- Thus, the pre-selected message associated with the selected ad is also based on the device type

056 Ground 4, 958 Ground 3:

**Levkovitz discloses “pre-selected” advertising (056 Claim 1 ,
958 Claim 1)**

Levkovitz discloses “pre-selecting” advertisement (958 and 056 Patents)

- **Board’s proposed construction:**
 - “[A] message that is selected any time before sending would be a ‘pre-selected’ message.” (056 ID at 14)
- **PO’s proposed construction** requires that “pre-select[ing]” advertisement / content:
 - Is distinct from “real-time selection” of advertisements (056 POR at 11)
 - “A message identified [*i.e.* preselection] based on the claimed factors and sent” could also be “selected and sent” (056 POR at 11)
- PO is **incorrect** that Levkovitz does not disclose this limitation:
 - Levkovitz describes its ads as being “stored” “in advance” and grouped for particular applications, *i.e.* pre-selected
 - PO repeats post-institution the **same** arguments it raised in the POPR, which the Board correctly noted did not address the Petitions’ mapping
 - Sur-Reply does not explain why storing and grouping ads in advance is not pre-selecting

Levkovitz discloses “pre-selecting” advertisement (958 and 056 Patents)

- Levkovitz recites that ads are transmitted to ad servers *in advance* for storage and grouping:

“[A]d server 110 may selectively determine which content items, which may be previously stored in the content items repository 118, match the content request being processed”

Ex. 1008 (Levkovitz) at ¶126; 056 Reply at 19-20

“Data transferor 124 may distribute content items to ad server(s) 110 periodically and/or in advance, for example, a certain time period before the content items are intended to be served to devices 170,”

Ex. 1008 (Levkovitz) at ¶147; 056 Pet. at 44

“[I]n one embodiment, a first ad server 150 may serve content items directed for presentation using a first application 176 (e.g., a chess game), whereas a second ad server 150 may serve content items directed for presentation using a second application 176 (e.g., a racing game).

Ex. 1008 (Levkovitz) at ¶127; 056 Pet. at 44

- Levkovitz’s pre-selected ads are later selected for transmission:

“[A]d server 110 may select one or more content items which may be adequately presented by device 17”

Ex. 1008 (Levkovitz) at ¶126; 056 Pet. at 45

Levkovitz discloses “pre-selecting” advertisement

- Levkovitz’s disclosure is exactly the same as the 056/958’s pre-selection:

“In the example of FIG. 1, updated content for a particular mobile communications device is stored on a data storage medium 130 as part of a group of pre-selected content for the mobile communications device. In this example, the data storage medium 130 is computer-readable. Potential data storage mediums include a hard drive, memory (such as RAM), and other storage devices (e.g., flash memory, a USB drive, compact disk, DVD, tape, or other media). The data storage medium may be implemented by one or more distinct storage mediums. In some embodiments, the updated content may be organized or indexed by a database of pre-selected content. The storage medium 130 may be a part of server 120 in some embodiments.”

056 Patent at 5:45-57; 056 Reply at 5

“The pre-selected content may be stored on a storage medium accessible by the server. Updated content may be chosen from pre-selected content based on at least one of the factors including a type of the mobile communication device, a telecommunication service, a subscription associated with the mobile communication device, and a service provider of the telecommunication service.”

056 Patent at 11:34-40; 056 Reply at 6

Levkovitz discloses “pre-selecting” advertisement (958 and 056 Patents)

- PO argues that Levkovitz’s selection of ads for transmitting to the device is not pre-selection, which Petitioner ***did not contend*** (958 POR 32-34, 958 Sur-Reply 16-17)
- This is ***the same argument*** the Board already rejected:

“Petitioner asserts that Levkovitz discloses choosing from among content items that have already been selected by being stored. For limitation 1d, Petitioner relies on Levkovitz’s disclosure that content may be selected to be sent to the device based on the device’s properties, which include the handset model. Pet. 40–41 (citing Ex. 1008 ¶ 126). Choosing content based on the handset model appears consistent with the ’958 patent’s disclosure that ‘[u]pdated content may be chosen from pre-selected content based on at least one of the factors including a type of the mobile communication device.’”

958 ID at 15-16

056 Ground 4, 958 Ground 3:
Levkovitz discloses advertising “for use in a video game”
(056 Claim 9, 958 Claim 1)

Levkovitz discloses advertising “for use in a video game”

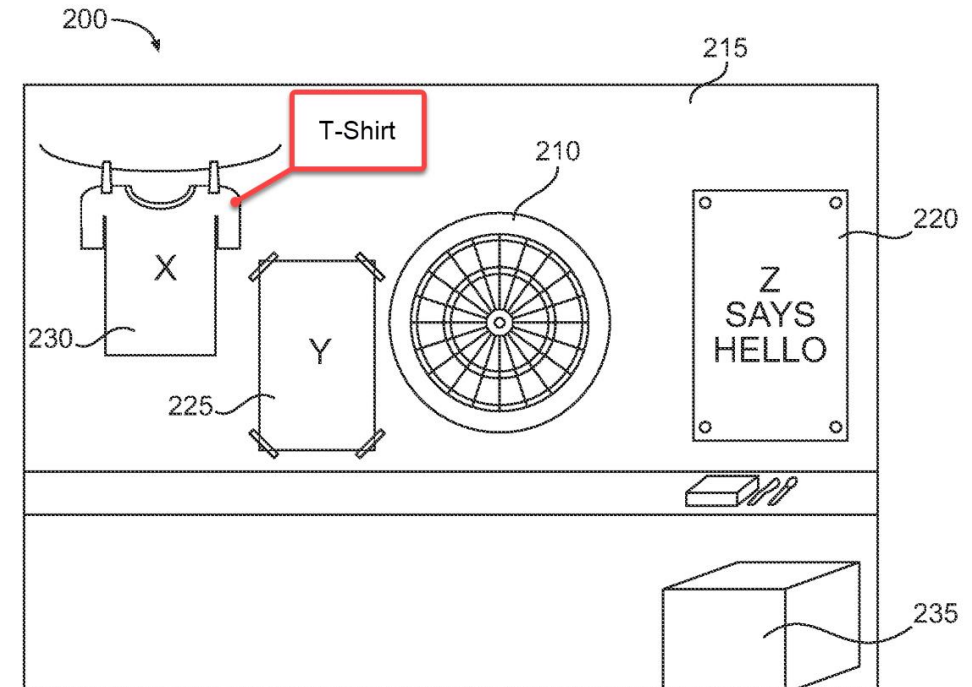
- PO argues that content “for use” must be narrowed by **seven** limitations:
 - Cannot merely be “skins” that are displayed (056 POR at 19)
 - Must affect game play (056 POR at 19)
 - Must alter game functionality (056 POR at 19)
 - Must relate to in-game purchases (056 POR at 21)
 - User must experience differences in the game (056 POR at 22)
 - Cannot merely be content that is displayed or accessed by code (958 POR at 2)
 - Must allow interaction by the user (056 Sur-Reply at 7)
- PO’s construction is **incorrect**:
 - PO does not argue “ordinary meaning”
 - PO does not argue lexicography or disclaimer
- PO’s construction is **inconsistent with** the claim language and specification

Levkovitz discloses advertising “for use in a video game”

- PO’s requirements that content cannot just be skins, and must affect gameplay, are inconsistent with the specification
- Specification discloses ad on a t-shirt which does not affect game play or provide user interaction

“In this example, virtually any of these items may be changed by receiving updated content on the mobile communication device. For instance, the shirt 230 might be updated to include a logo associated with third party X (as shown). The poster 225 might advertise an upcoming movie for third party Y, and chalk board 220 may contain a handwritten advertisement for third party Z (as shown).”

Ex. 1001 (958 patent) at 6:45-49, Fig. 2A; 056 Reply at 7-8



Levkovitz discloses advertising “for use in a video game”

- PO’s expert agrees that PO’s definition of “usable” is inconsistent with specification

“For instance, the shirt 230 might be updated to include a logo associated with third party X (as shown).”

Ex. 1001 (958 patent) at 6:45-49, Fig. 2A; 056 Reply at 7-8

“Q. [B]ased on your understanding of the claims, updating the tshirt to include a logo associated with a third party, that would not be updated content that is for use or usable in the game?”

A. ... [J]ust having something on a shirt, and if we stop there and we don’t give any additional information, that is just content but that doesn’t disclose for use yet.”

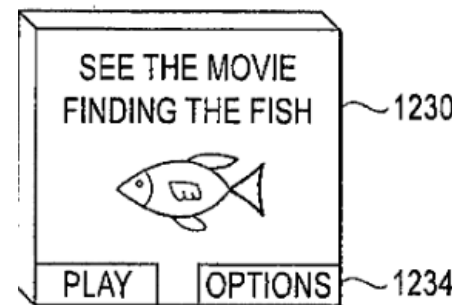
Ex. 1020, 26:3-18; 056 Reply at 8

Levkovitz discloses advertising “for use in a video game”

- Levkovitz discloses advertisements that are *usable in the video game*

“For example, the user may complete a level in the game, and the first advertisement may be presented, as indicated at box 1220. Optionally, the first advertisement may occupy substantially the full-screen of the wireless communication device. “

Ex. 1008 (Levkovitz) at ¶320; 056 Pet. at 49



“Levkovitz teaches that these “content items” are “directed for presentation using a first application 176 (e.g., a chess game),” and are therefore **for use** in a video game.”

Ex. 1003 (Zagal Decl.) at ¶175; 056 Pet. 44

Levkovitz discloses advertising “for use in a video game”

- Levkovitz’s pop-up ads are similar to 056/958 patent’s pop-up message
- Levkovitz’s disclosure of usable ads:

“For example, the user may complete a level in the game, and the first advertisement may be presented, as indicated at box 1220. Optionally, the first advertisement may occupy substantially the full-screen of the wireless communication device. “

Ex. 1008 (Levkovitz) at ¶320; 056 Pet. at 49

- 958/056 patents’ disclosure of pop-up content:

“The updated content may also be displayed in a **pop-up window**. Pop-up windows that are spawned from the operation of the game are considered to be in-game for the purpose of this disclosure.”

Ex. 1001 (056 patent) at 8:6-9; 056 Reply at 21

Levkovitz discloses advertising “for use in a video game”

- PO: Levkovitz similar to Gatto, which prosecution overcame
- Applicant distinguished Gatto because its hyperlinks opened a separate application to present content **outside** the alleged video game

(1004). Nothing in *Gatto* discloses that the screen saver would be usable inside and as part of the email ticket itself (i.e., the alleged “video game”). Rather, based on the typical operation of screen savers, a person of ordinary skill would readily understand that the screen saver would be activated separately from and outside of the email ticket based on a period of inactivity at the user’s device. Similarly, nothing in *Gatto* discloses that any information downloaded in response to selecting the “About the Company,” “News at Coke,” or “Coca-Cola Store” hyperlinks would even be presented inside or as part of the email ticket itself, as opposed to within a separate application (e.g., a web browser). Therefore, *Gatto* also fails to disclose any updated “promotional items” or content that would be “usable in” the email ticket or a “video game” itself, as opposed to a separate application program. As *Gatto* does not disclose these claim elements, it cannot anticipate.

Ex. 2002 (202 File History) at 142-43;
056 POR at 23

056 Ground 4, 956 Ground 3:

Levkovitz discloses “track[ing] the distribution of updated content” (056 Claim 7, 958 Claim 7)

Levkovitz discloses “track[ing] the distribution of updated content”

- Levkovitz discloses logging information regarding advertisements that have been presented:

“Device 170 may store or otherwise log information related to presentations performed by device 170, e.g., data indicating the content item(s) presented, data the starting time and/or ending time of the presentations, data indicating operations performed by device 170 and/or the user of device 170 during or after the presentation (e.g., pressing a button, dialing, sending a SMS or MMS message, placing a call, or the like).”

Ex. 1008 (Levkovitz) at ¶132; 056 Pet. at 53

Levkovitz discloses “track[ing] the distribution of updated content”

- PO: Some content could be uploaded but not presented, and therefore not logged (056 POR at 46-47)
- Claims do not require ***all*** uploaded content must be tracked
- Levkovitz does not disclose uploaded ads that are not tracked

“[A] first ad server 150 may serve content items directed for presentation using a first application 176 (e.g., a chess game)”

Ex. 1008 (Levkovitz) at ¶127; 056 Pet. at 49

056 Ground 4:
**Levkovitz discloses “check[ing] for availability of bandwidth”
(056 Claim 8)**

Levkovitz discloses “check[ing] for availability of bandwidth”

- Levkovitz describes correlating content with device capabilities:

“Additionally or alternatively, 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 (Levkovitz) ¶160; 056 Pet. at 53

“Protocol handler 154 may receive content request data, for example, information about device 170, information about the functional capabilities of device 170,”

Ex. 1008 (Levkovitz) at ¶172; 056 Pet. at 53

- Dr. Zagal explained that such functional capabilities include availability of bandwidth, which Dr. Akl did not dispute:

“In my opinion, a POSITA would understand that ‘information about the device’ and/or ‘other suitable parameters’ would include information about the availability of bandwidth, i.e., the connection between the device and the server. This is particularly true because Levkovitz recognizes that “=‘operations, in which content is downloaded to or uploaded from the wireless device, may consume system resources and bandwidth resources.’”

Ex. 1008 (Levkovitz) ¶160; 056 Pet. at 53

Choi renders obvious “check[ing] for availability of bandwidth”

- Choi discloses selecting an ad based on whether bandwidth is available

“The ad system of the present invention can, in at least some embodiments, 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. These capabilities criteria can include any characteristic of the target device environment that is available to the application into which the ad is to be served; these capabilities can include but are not limited to: screen size and color depth; number and type of screens, including internal and external (with respect to clamshell devices); device model; available storage; location capabilities such as GPS; media input capabilities (audio, still image, and video); media playback capabilities (audio and video); web browsing capabilities; processor speed; network transport capabilities (such as TCP vs WAP) and **speed (bandwidth and latency)**”

Ex. 1006 (Choi) at ¶89; 056 Pet. 39-40

- PO does not dispute that Choi discloses this limitation

056 Ground 5, 958 Ground 4:
Levkovitz-Chu render obvious “in-game placement location”
(056 Claim 5, 958 Claim 3)

Chu renders obvious sending “in-game placement location”

- PO makes same arguments as Hays-Chu, argues that “in-game placement location” must be narrowed by **three** limitations:
 - Cannot be an indication of which game asset, but their specific location (056 POR at 25)
 - Must be an X/Y coordinate (056 Sur-Reply at 16)
 - Can’t be “standardized” (056 Sur-Reply at 9-10)
- PO’s construction is **incorrect**:
 - PO does not argue “ordinary meaning”
 - PO does not argue lexicography or disclaimer
- PO’s construction is **inconsistent with** the claim language and specification (reads out embodiments)

Chu renders obvious sending “in-game placement location”

- Chu describes the server providing the location of where advertisements appear to the client

“[T]he present invention provides a unique method for online games to request advertising metadata and schedules that determine what advertisements are to display in specified locations within the game”

Ex. 1007, 14:20-14:26; 056 Pet. at 41

“In one embodiment, the present invention provides a unique method for receiving and posting messages and advertising assets. ... For example, FIG. 7 illustrates an XML format structure that may be utilized to send metadata [which includes] A Location object (530, 630) represents the location within a game at which advertisements are to appear and contains attributes and elements such as ID, name, and description.”

Ex. 1007 (Chu) 14:47-15:5; 056 Pet. at 41

```
530 - <Location>
      <ID>2147483647</ID>
      <Name>Engine Oil Pitstop</Name>
    </Location>
```

Ex. 1007 (Chu) at Fig. 7, 056 Pet. at 41

Chu renders obvious sending “in-game placement location”

- PO cites to Chu’s Figure 7 to support its position

```
<?xml version="1.0" encoding="UTF-8" ?>
500 - <CampaignListing xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
      xsi:noNamespaceSchemaLocation="CampaignListing.xsd">
510   - <Campaign>
        <ID>2147483647</ID>
520   - <AdListing interval="30">
        - <Ad>
              <ID>2147483647</ID>
              <Type>image</Type>
              <Width>200</Width>
              <Height>200</Height>
              <Media>/advertising/media/2147483647.jpg</Media>
        - </Ad>
525   - <Ad>
              <ID>2147483648</ID>
              <Type>video</Type>
              <Width>200</Width>
              <Height>200</Height>
              <Media>/advertising/media/2147483648.jpg</Media>
        - </Ad>
        - <Ad>
              <ID>2147483648</ID>
              <Type>image</Type>
              <Width>200</Width>
              <Height>200</Height>
              <Media>Penzoil engine go. Go with the best!</Media>
        - </Ad>
        </AdListing>
530   - <Location>
        <ID>2147483647</ID>
        <Name>Engine Oil Pitstop</Name>
        </Location>
        </Campaign>
      </CampaignListing>
```

Ex. 1007 (Chu) at Fig. 7; 056 Pet. at 41

Chu renders obvious sending “in-game placement location”

- PO argues Chu does not disclose that the location metadata is sent from the server to client
- Chu:

“[T]he present invention provides a unique method for online games to request advertising metadata and schedules that determine what advertisements are to display in specified locations within the game”

Ex. 1007, 14:20-14:26; 056 Pet. at 41

“In one embodiment, the present invention provides a unique method for receiving and posting messages and advertising assets. ... For example, FIG. 7 illustrates an XML format structure that may be utilized to send metadata ... A Location object (530, 630) represents the location within a game at which advertisements are to appear and contains attributes and elements such as ID, name, and description.”

Ex. 1007 (Chu) 14:47-15:5; 056 Pet. at 41

Chu renders obvious sending “in-game placement location”

- Dr. Zagal’s testimony regarding motivation to combine is unrebutted:

“A POSITA would have been motivated to use Chu’s teachings of the server providing to the client the specific in-game locations of advertisements because of the well-known benefits of being able to display advertisements at in-game locations. 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.”

“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, in my opinion, 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 (Zagal Decl.) at ¶¶209-10; 056 Pet. at 55-56

Chu renders obvious sending “in-game placement location”

- PO: Levkovitz serves ads broadly, Chu is focused on serving ads at a particular location (056 POR at 51)
- This distinction has no bearing on whether a POSITA would be motivated to use Chu’s location metadata when sending Levkovitz’s advertisement



“[A] reference must be considered for everything it teaches by way of technology and is not limited to the particular invention it is describing and attempting to protect.”

Belden Inc. v. Berk-Tek LLC, 805 F.3d 1064, 1076 (Fed. Cir. 2015)

958 Ground 3:

Levkovitz discloses “send[ing] the pre-selected in-game advertising” (958 Claim 1)

Levkovitz discloses “send[ing] the pre-selected in-game advertising”

- Levkovitz discloses a server ***sending*** advertisements to a client

“The content client may periodically connect to a content server or ad server and request content. 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, and/or based on parameters related to a user of the mobile phone, e.g., age, age group, gender, marital status, profession, occupation, geographical location, proximity to geographical places, or the like.”

Ex. 1008 (Levkovitz) at ¶¶6; 958 Reply at 21

“Ad server 110 may serve, transfer or transmit one or more selected content items to communicator 150.”

Ex. 1008 (Levkovitz) at ¶¶128; 958 Reply at 21

Levkovitz discloses “send[ing] the pre-selected in-game advertising”

- PO and Dr. Akl argue Levkovitz **requires** WAP, and that WAP “does not download or upload data” (056 POR 47)
- PO and Dr. Akl are wrong on both points:

“In some embodiments, a WAP advertisement presented before or within a requested WAP-page may be associated with one or more user-selectable actions, e.g., ... **locally saving the WAP advertisement**, or a portion thereof, for subsequent (e.g., offline or online) viewing or playback”

Ex. 1008 (Levkovitz) at ¶375; 958 Reply at 20

“Although portions of the discussion herein may relate, for demonstrative purposes, to “WAP” advertisements, embodiments of the invention **are not limited in this regard**, and may be used, for example, in conjunction with non WAP advertisements, in conjunction with advertisements delivered using other wireless communication protocols or standards, or the like.”

Ex. 1008 (Levkovitz) at ¶382; 958 Reply at 20

Dr. Zagal's testimony should be given due weight

Dr. Zagal's testimony should be given due weight

- PO: Dr. Zagal parrots the Petition and thus his testimony should be given little weight
- The Board already rejected this argument:

“Patent Owner argues that we should give no weight to the testimony of Dr. José Zagal, Petitioner’s technical declarant, because it largely parrots the Petition. Prelim. Resp. 26–32 (citing Xerox Corp. v. Bytemark, Inc., IPR2022-00624, Paper 9 at 15 (PTAB Aug. 24, 2022) (precedential)). We disagree. Xerox stands for the proposition that a declaration is entitled to little weight when it restates a petition’s unsupported, conclusory assertions without any additional supporting evidence or reasoning. IPR2022-00624, Paper 9 at 15 (“Dr. Jones does not cite to any additional supporting evidence or provide any technical reasoning to support his statement. Thus, the cited declaration testimony is conclusory and unsupported, adds little to the conclusory assertion for which it is offered to support, and is entitled to little weight.”). For the reasons discussed above in the Hays ground, we find that the assertions in the Petition are sufficiently supported by the teachings of Hays, thus distinguishing this situation from the one described in Xerox.”

056 ID at 18

PO presents no evidence of secondary considerations

No evidence of secondary considerations

- All of PO's arguments fail to establish nexus
 - Long-felt need: mobile phone developers experienced difficulty in developing games (056 POR at 52-53)
 - But undisputed there existed mobile gaming consoles, like the PSP
 - Long-felt need: in-game advertising was desirable (056 POR at 53-54)
 - Every prior art reference describes in-game advertising
 - Teach away: developers could not update content before the 056/958 patent
 - Hays and Levkovitz describe updating advertisements



“[O]bjective evidence of nonobviousness lacks a nexus if it exclusively relates to a feature that was known in the prior art.”

Yita LLC v. MacNeil IP LLC, 69 F. 4th 1356, 1364 (Fed. Cir. 2023)

No evidence of secondary considerations

“At the time, the only way in which games could be “updated” was to download a new version of the game in its entirety. Ex. 2004, ¶233. This was not practical to do on a mobile device with great size and storage limitations. Ex. 2004, ¶233. The '056 Patent was revolutionary in its time and solved this problem by sending updated content without requiring that the game be downloaded anew and in its entirety.”

056 POR at 53