

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

**IPR2024-00132
U.S. Patent No. 9,731,202**

Petitioner's Demonstratives

Hearing: January 28, 2025

Summary: Grounds

Ground	Claim(s) challenged
1. Hays	1-9
2. Hays + Choi	1-9
3. Hays + Chu	4
4. Hays + van Datta	6
5. Levkovitz	1-3, 5-9
6. Levkovitz + Chu	4
7. Levkovitz + van Datta	6

Summary: Disputed Issues (Claim 1)

- **Claim 1 disputed issues:**
 - **“checking” content** (1[b], Grounds 1 (Hays), 2 (Hays/Choi)):
 - PO relies on adding **four** limitations to the word “checking”
 - Same argument rejected pre-institution
 - Hayes discloses “select[ing] advertisements based on weights derived from factors that include client’s device type.” *ID* at 24-25
 - **“for use/useable” content** (1[a], Grounds 1 (Hays), 5 (Levkovitz)):
 - PO relies on reading in **seven** limitations to the word “use”
 - Both Hayes and Levkovitz disclose “using” content in-game
 - **“updating” content** (1[a], Ground 1 (Hays)):
 - POR argued that Hays only discloses ads that are pre-loaded into the game code (POR 19)
 - PO appears to have dropped this argument
 - **“uploading” content** (1[c], Ground 5 (Levkovitz)):
 - PO limits Levkovitz disclosure by incorrectly characterizing “WAP” protocol in POR and Sur-Reply

Summary: Disputed Issues (Claim 1)

- **Dependent claims disputed issues:**
 - **Claim 4: “in-game placement”** (Grounds 1 (Hays), 3 (Hays/Chu), 6 (Levkovitz/Chu)):
 - PO argues “placement” cannot be “standardized” and must transmit x-y position (POR at 21)
 - Both Hays and Chu transmit in-game locations (the game asset) for the ads
 - **Claim 5: “tracking what has been uploaded”** (Grounds 1 (Hays), 5 (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 misinterprets Levkovitz’s “WAP” embodiment and ignores express disclosure of downloading
 - **Claim 6 “displaying ... at a location based on user interaction”** (Grounds 1 (Hays), 4 (Hays/van Datta), 5 (Levkovitz), 7 (Levkovitz/van Datta)):
 - PO argues Hays only describes when, not where, to display ad (POR 24-26); Levkovitz’s ad is not at a location based on user interaction (POR 36-37); van Datta’s user tags an asset, which is not a location (POR 46)
 - PO ignores Hays’s disclosure of ads appearing at same location as user (Reply 11); Levkovitz’s inactivity is a change in user activity (22-23); tagging an asset is tagging a location (18)

Summary: Disputed Issues (Claim 1)

- **Motivation to Combine disputed issues:**
- *Ground 2: Hays and Choi*
 - 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
- *Ground 3: Hays and Chu*
 - 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
- *Ground 4: Hays and van Datta*
 - PO: Hays is agnostic to location, van Datta directed to narrowing its audience with customized ads
 - Hays expressly says ads are placed on specified ad units located within the game
 - Hays says targeted ads are desirable
- *Ground 6: Levkovitz and Chu*
 - PO makes same arguments as Ground 3
- *Ground 7: Levkovitz and van Datta*
 - PO makes same arguments as Ground 4

'202 Patent Overview

1. A method for providing updated video-game content to a mobile communication device for use in a mobile video game, the method comprising the steps of:

- receiving a request for the updated video-game content from the mobile communication device, the updated video-game content being usable in the video game that already exists on the mobile communication device;
- checking what updated video-game content to send based on one of the factors including a type of the mobile communication device, a telecom service associated with the mobile communication device, and a service provider of the telecom service; and
- uploading updated video-game content to the communications device, the video-game content being usable when the video game operates on the communications device.

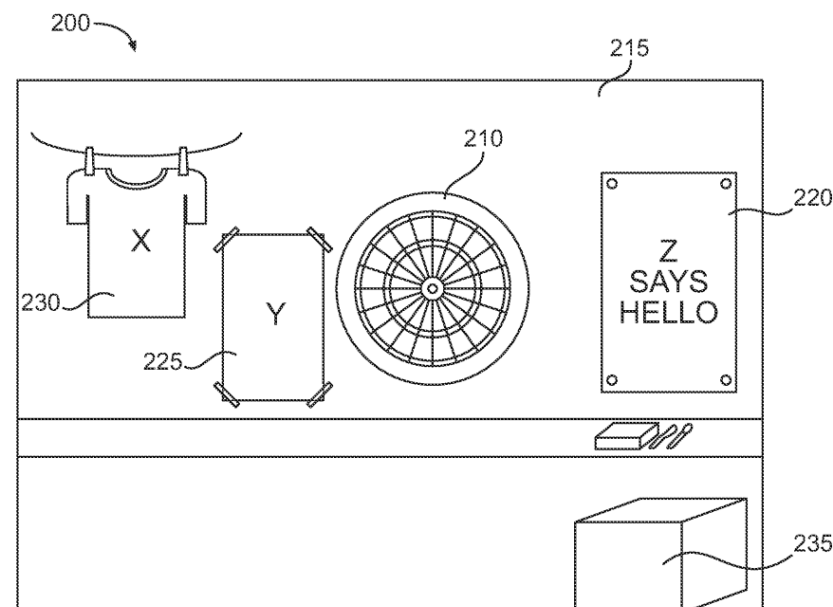
'202 Patent Overview

“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**.”

Ex. 1001 (202 Patent) at Abstract; 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).”

Ex. 1001 (202 Patent) at 6:42-47, Fig. 2a; Reply 6



'202 Patent Overview: Patent Family



**U.S. Pat. No.
9,731,202
IPR2024-00132**

Div.

U.S. Pat. No. 10,617,958
• IPR2024-00171 (Feb. 6, 2025 Hearing)

Div.

U.S. Pat. No. 11,117,056
• IPR2024-00200 (Feb. 6, 2025 Hearing)

Summary of Prior Art

Summary of Prior Art: Hays (Ex. 1005)

- Hays:

“An 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. The targeted advertisements may be provided via a network connection **while the video game applications are executed** on gaming devices, or via other means.”

Ex. 1005 (Hays) at Abstract; Pet. 8

“The advertising matching and weighting system 220 may calculate the weight of each **advertisement based on ... the specific client type** ... The advertising matching and weighting system 220 then selects one or more advertisements from the weighted advertisement set.”

Ex. 1005 (Hays) at ¶43; Pet. 9

“[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; Pet. 9

Summary of Prior Art: Levkovitz (Ex. 1008)

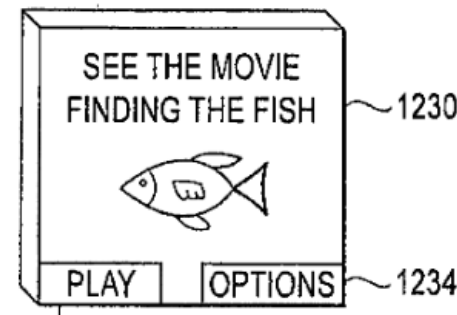
- Levkovitz:

“[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; Pet. 13

“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; Pet. 14



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; Pet. 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; Pet. 10-11

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; Pet. 11

“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; Pet. 11

Summary of Prior Art: van Datta (Ex. 1009)

- Van Datta:

“A system and method for placing an advertisement in a digital environment based upon a user's choice, subject to certain predetermined parameters, is disclosed. Through the method, a user is assigned a rating based upon, for example, his performance in a game. A list of advertisements which correspond to that rating is displayed to the user, who may then select a desired advertisement from the list. The selected advertisement is then displayed in the digital environment.”

Ex. 1009 (van Datta) at Abstract; Pet. 12

“The user may, in an embodiment of the present invention, drag-and-drop an advertisement (such as may be displayed in advertisement preview window 430) into the particular advertising asset displayed in the environment window 440.”

Ex. 1009 (van Datta) at 7:55-8:9; Pet. 12

**Ground 1: Hays discloses “checking what content to send”
(Claim 1)**

Ground 1/Claim 1: “Checking what content to send based on factors”

- Claim 1 requires “checking what ... content to send based on” one of the following factors:

1. A type of the mobile communication device
2. A telecom service associated with the mobile communication device
3. A service provider of the telecom service

Ex. 1001, cl. 1

Ground 1/Claim 1: “Checking what content to send based on factors”

- PO argues that “checking” must be narrowed by **four** limitations:
 - Cannot be related to the data that is transmitted (POR 10)
 - Must check that ad is compatible with the user’s device (POR 10)
 - Must check that ad is compatible with service provider (POR 11-12)
 - Cannot simply compare weights and rank advertisements, must directly use the factors when selecting an advertisement (POR 12)
- 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

Ground 1/Claim 1: “Checking what content to send based on factors”

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

checking what updated video-game content to send based on one of the factors including a type of the mobile communication device, a telecom service associated with the mobile communication device, and a **service provider of the telecom service**; and

Ex. 1001 (202 patent) at cl. 1; Reply 3-4

“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.”

Ex. 1001 (202 patent) at 10:41-42; Reply 3-4

Ground 1/Claim 1: “Checking what content to send based on factors”

- 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.”

Ex. 1001 (202 patent) at 10:41 -42; Reply 3-4

Ground 1/Claim 1: “Checking what content to send based on factors”

- Hays discloses “checking what content to send” ***based on mobile 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. 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; Pet. 17

Ground 1/Claim 1: “Checking what content to send based on factors”

- Hays discloses “checking what content to send” ***based on a service provider of a telecom service***

“[A]dvertising can be further targeted based on specific **demographic characteristics of a 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 ¶44; Pet. 17-18

“Different service providers have different ranges of IP addresses, and so the use of an IP address for selecting an advertisement constitutes selection based on a service provider.”

Ex. 1003 (Zagal Decl.) at ¶100; Pet. 18

Ground 1/Claim 1: “Checking what content to send based on factors”

- PO: Hays does not target advertising based on the IP address, but the demographic information obtained via the IP address (Sur-Reply 3)
- PO misunderstands Hays:

“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 ¶44; Pet. 18

Ground 1/Claim 1: “Checking what content to send based on factors”

- PO: Hays’s teachings regarding “game console” not applicable to mobile devices (Sur-Reply 4)
- Hays explicitly applies to mobile devices:

“[T]he invention can be practiced with other system configurations, including Internet appliances, hand-held devices, wearable computers, **cellular or mobile phones** ... the term “computer,” “**game console**,” “console,” or the like, as used generally herein, refers to any of the above devices, as well as to any data processor.”

Ex. 1005 (Hays) at ¶51; Pet. 18

- PO’s expert admits Internet-capable portable game consoles were available in 2005:

“[T]he PlayStation Portable I think it came out ... [m]aybe 2005. ... I think around 2005, probably, when the [Nintendo] DS came out.”

Ex. 1020 (Akl Tr.) at 8:6-9:3; Reply 5

- PO: PSP and Nintendo DS are not “mobile communication devices” because they did not support cellular services (Sur-Reply 5)
- PSP/Nintendo supported WiFi, PO excludes “WiFi” from “mobile communications”

Ground 1: Hays discloses “content being usable in the video game” (Claim 1)

Ground 1/Claim 1: “content being usable in the video game”

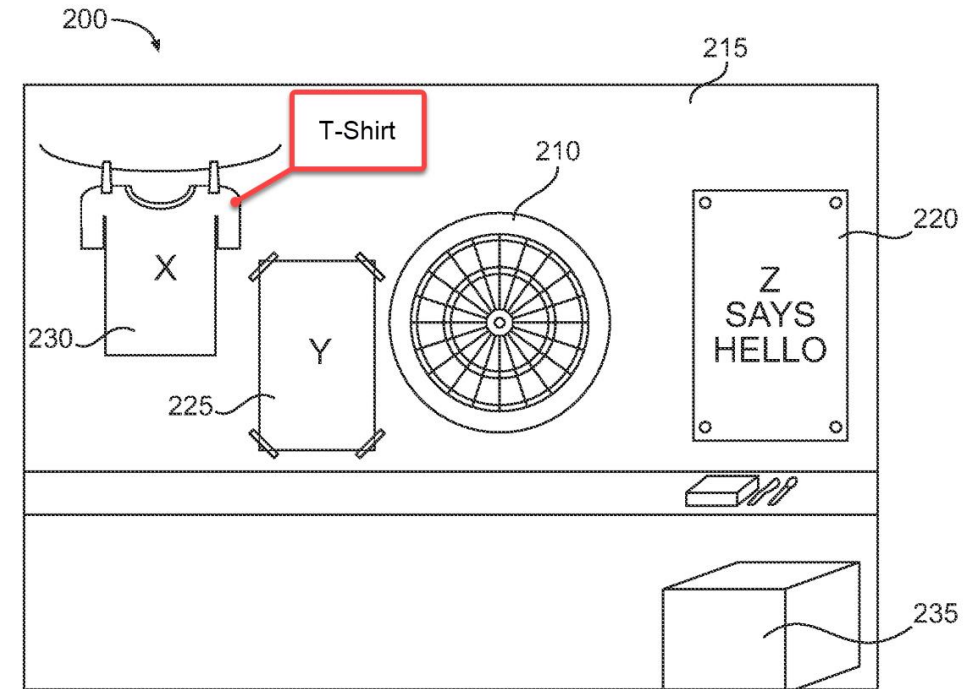
- PO argues that “usable” content must be narrowed by **seven** limitations:
 - Cannot merely be “skins” that are displayed (POR 14-15)
 - Must affect game play (POR 15)
 - Must alter game functionality (POR 15)
 - Must relate to in-game purchases (POR 16)
 - User must experience differences in the game (POR 16)
 - Cannot merely be content that is displayed or processed by code (POR 18)
 - Must allow interaction by the user (Sur-Reply 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

Ground 1/Claim 1: “content being usable in the 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 (202 patent) at 6:43-47, Fig. 2A; Reply 6



Ground 1/Claim 1: “content being usable in the 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 (202 patent) at 6:47-50, Fig. 2A; Reply 5

“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; Reply 5

Ground 1/Claim 1: “content being usable in the video game”

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

“[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; Pet. 17

- PO argues in Sur-Reply:

“According to Petitioner, ‘the player has the option to drink the advertised product.’ Reply, 6. Yet nowhere does Hays include any suggestion that the player’s character has the option to drink any advertised product ***in the game***, as opposed to suggesting the player do so in real life.”

Sur-Reply 7 (emphasis in original)

Ground 1/Claim 1: “content being usable in the video game”

- PO: Prosecution overcame Gatto’s teachings of hyperlinks, which are similar to skins
- Gatto disclosed emails with hyperlinks, and the examiner mapped “content” to the content “download[ed] **via** the hyperlink,” not the hyperlink itself:

video game. In addition, Applicant notes that the “promotional items” identified by the Examiner are merely items available for download via hyperlink in the email. There is no indication that these promotional items are “usable in the video game.” Indeed, it would not make sense for an email to provide hyperlinks for content that is usable in the email itself.

Ex. 1002 (202 File History) at 188; Reply 7

- Applicant never argued claims require affect on game play or game functionality

**Ground 1: Hays discloses “updated video-game content”
(Claim 1)**

Ground 1/Claim 1: “updated video-game content”

- PO: Hays’s advertisements are pre-loaded, and not “**updated** video-game content” (POR 7-8)
- PO is incorrect:

“The game playing device 126 may request and **receive advertisements** from the advertisement management service system 108”

Ex. 1005 (Hays) at ¶32; Reply 7

“[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; Reply 7-8

Ground 1: Hays discloses “providing an in-game placement location” (Claim 4)

Ground 1/Claim 4: “providing an in-game placement location”

- PO argues that “in-game placement location” must be narrowed by **two** limitations:
 - Cannot be an indication of which game asset, but their specific location (POR 20)
 - Must be an X/Y coordinate (Sur-Reply 16)
 - Can’t be “standardized” (Sur-Reply 9)
- 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)

Ground 1/Claim 4: “providing an in-game placement location”

- PO’s “specific,” “XY coordinate” requirements read out embodiments from the ‘202 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.”

Ex. 1001 (202 Patent) at 12:28-32; Reply 9

“[T]he ‘202 [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; Reply 9

Ground 1/Claim 4: “providing an in-game placement location”

- Hay’s “ad units” are described identically to the ‘202 patent’s “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) . . .”

Ex. 1001 (202 Patent) at 12:28-32; Reply 9

“[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; Pet. 23

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

“[T]he ‘202 [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; Reply 9

Ground 1/Claim 4: “providing an 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; Pet. 23

“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 ¶113; Pet. 23

Ground 1/Claim 4: “providing an 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; Pet. 23

“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 ¶114; Pet. 24

Ground 1/Claim 4: “providing an 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; Reply 21

Ground 1/Claim 4: “providing an 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 ¶115; Pet. 25

- PO argues Dr. Zagal did not address sending the location “as part of the updated content” (Sur-Reply 9)
- But Dr. Zagal testified it was obvious to send “the specific ad unit [*i.e.* claimed location] **when sending an advertisement**” (Ex. 1003 at ¶115)

Ground 1: Hays discloses “tracking what has been uploaded to the mobile communications device” (Claim 5)

Ground 1 / Claim 5: “tracking what has been uploaded”

- PO argues Hays does not “track what has been uploaded” because:
 - Hays does not track all data, only data uploaded for a session (POR 22-23)
 - Hays’ tracking of advertisement impressions only tracks user’s reactions (POR 23)
- 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

Ground 1 / Claim 5: “tracking what has been uploaded”

- 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; Reply 10

“[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; Reply 10

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

Ground 1 / Claim 5: “tracking what has been uploaded”

- 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; Pet. 25-26

“[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 ¶117; Pet. 25-26

Ground 1 / Claim 5: “tracking what has been uploaded”

- 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; Pet. 26

“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 ¶118; Pet. 26

**Ground 1: Hays discloses “displaying the videogame content within the game at a location based on user interaction”
(Claim 6)**

Ground 1/Claim 6: “displaying ... at a location based on user interaction”

- PO argues Hays does not provide a “location based on user interaction” because:
 - Hays’s user interaction only specifies **when** not **where** content is displayed
 - Hays does not disclose that its bots are placed in a location based on user interaction
 - Hays’s ad locations are “pre-set” and not a location based on user interaction
 - Hays’s “zone static” ads merely determine which ads to rotate in, not their location
- PO is wrong:
 - Hays describes ads displayed where the user is located
 - Hays discloses its bots interact with the user, and so its location is based on where the user traveled to based on user interaction
 - Hays’s ad locations have an in-game location
 - Hays expressly states a “zone” is a location, and that ads are not changed for a zone while the player remains in the zone

Ground 1/Claim 6: “displaying ... at a location based on user interaction”

- PO argues:
 - Hays’s user interaction only specifies **when** not **where** content is displayed
 - Hays does not disclose that its bots are placed in a location based on user interaction
- Hays discloses displaying advertising bots where the player is located (i.e. **location**)

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

Ex. 1005 (Hays) at ¶79; Pet. 27-28

- As Dr. Zagal explains: the bot’s location moves with the player, and thus its location **must** be based on the user interaction of arriving and staying at that location

“The location of the game character displaying the Pepsi advertisement is based on the location of the player’s character, which is therefore **based on the user interaction of arriving at that location**. Moreover, the location of the displayed advertisement would be based on the **user interaction of either staying in that location or moving to a different location**.”

Ex. 1003 (Zagal Decl.) at ¶123; Pet. 28

Ground 1/Claim 6: “displaying ... at a location based on user interaction”

- Hays discloses displaying advertisements in between levels (i.e. **location**)

“[T]he advertisement management service may provide available ad units that allow advertising at the beginning and end of a game and **in between game levels** (similar to commercials).”

Ex. 1005 (Hays) at ¶¶80, 78; Pet. 27

- The “ad unit” for displaying the game between levels is at a specific location

“Because these mini games do not appear until a level is completed, the location of the advertisement is based on user interaction, specifically **the interaction of completing the level** to trigger the mini game which displays the advertisement at a specific location.”

Ex. 1003 (Zagal Decl.) at ¶120 Pet. 27

Ground 1/Claim 6: “displaying ... at a location based on user interaction”

- PO argues: Hays’s “zone static” ads merely determine which ads to rotate in, not their location
- Hays discloses displaying in advertisement in a zone (*i.e. location*) that the user is in

“Zone Static: Advertisement stays static as long as the user is **in the zone**, per session. ... (e.g., a McDonald’s store does not switch to a Citibank in the middle of game play).”

Ex. 1005 (Hays) at ¶62; Pet. 27

“When a game is shipped, it may have a fixed set of available ad units grouped into **zones** (typically delineated by game levels or **areas of play**).”

Ex. 1005 (Hays) at ¶19; Reply 8

- Dr. Zagal’s undisputed testimony that whether a user remains in a zone depends on user’s interaction with game

“[W]hether a McDonald’s or a Citibank ad is displayed at **a particular location** (i.e. a store front) is **based on the user interaction of continuing the current game play session** or logging off and starting a new session.”

Ex. 1003 (Zagal Decl.) at ¶122 Pet. 27

Ground 2: Hays-Choi renders obvious “checking what content to send based on service provider” (Claim 1)

Ground 2/Claim 1: “checking ... 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; Pet. 35

Ground 2: Motivation to Combine Hays and Choi (Claim 1)

Ground 2/Claim 1: Motivation to Combine

- 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 ¶132; Pet. 32

“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 ¶133; Pet. 33

Ground 2/Claim 1: Motivation to Combine

- 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 ¶133; Reply 15

Ground 2/Claim 1: Motivation to Combine

- 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 ¶131; Reply 14



“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); Reply 14

Ground 2/Claim 1: Motivation to Combine

- PO: Hays is focused on sending ads to any kind of game, Choi is focused on a specific game (POR 30-31)
- 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)

Ground 3: Hays-Chu renders obvious “providing an in-game placement location (Claim 4)”

Ground 3/Claim 4: “Providing an in-game placement location”

- PO argues that “in-game placement location” must be narrowed by **two** limitations:
 - Cannot be an indication of which game asset, but their specific location (POR 20)
 - Must be an X/Y coordinate (Sur-Reply 16)
- 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, as discussed in Ground 1

Ground 3/Claim 4: “Providing an 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; Pet. 39

“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; Pet. 39

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

Ex. 1007 (Chu) at Fig. 7; Pet. 39

Ground 3/Claim 4: “Providing an 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; Pet. 39

Ground 3/Claim 4: “Providing an 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; Pet. 39

“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; Pet. 39

Ground 3: Motivation to Combine Hays and Chu (Claim 4)

Ground 3/Claim 4: Motivation to Combine

- 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 ¶¶147-48; Pet. 38-39

Ground 3/Claim 4: Motivation to Combine

- 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 ¶¶ 147-48; Pet. 38-39

Ground 3/Claim 4: Motivation to Combine

- PO: Hays is focused on sending ads to any kind of browser-based game, Chu is focused on a designing a specific game application (POR 34-35)
- 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)

Ground 3/Claim 4: Motivation to Combine

- PO: Hays's "ad units" are not fixed at a specific location, and so not suitable for receiving location data (POR 35)
- 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; Reply 18

"[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; Pet. 23-24

Ground 4: Hays-van Datta render obvious “a location based on user interaction” (Claim 6)

Ground 4/Claim 6: “location based on user interaction”

- PO argues “location” cannot be specifying the game asset, but their specific location (Surreply 18)
- PO argues that van Datta does not **display** the advertisement at the user-specified location (POR 37)
- PO is wrong:
 - Specification and Dr. Akl agree that the “location” can be the object, not just X-Y coordinate
 - Van Datta discloses a user “tagging” a video game element, and that element is designated to receive an advertisement
 - Van Datta clearly states that the advertisement is displayed once it is attached to the location designated to the user.

Ground 4/Claim 6: “location based on user interaction”

- PO’s “specific,” “XY coordinate” requirements for location read out embodiments from the ‘202 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.”

Ex. 1001 (202 Patent) at 12:28-32; Reply 9

“[T]he ‘202 [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; Reply 9

Ground 4/Claim 6: “location based on user interaction”

- Van Datta discloses displaying advertisements at locations based on a user dragging-dropping or tagging assets

“A system and method for placing an advertisement in a digital environment based upon a user's choice, subject to certain predetermined parameters, is disclosed.”

Ex. 1009 (van Datta) at Abstract; Pet. 43

“Certain objects in a digital medium such as a video game may be ‘tagged,’ these ‘tagged’ areas being subject to the insertion or placement of advertising content. For example, and as shown in FIG. 1A, the face of a billboard 100 may be ‘tagged’ (110) to indicate that an advertisement may be embedded in that location.”

Ex. 1009 (van Datta) at 2:59-64; Pet. 43

“The user may, in an embodiment of the present invention, drag-and-drop an advertisement (such as may be displayed in advertisement preview window 430) into the particular advertising asset displayed in the environment window 440.”

Ex. 1009 (van Datta) at 8:20-24; Pet. 44

Ground 4/Claim 6: “location based on user interaction”

- PO argues that van Datta does not **display** the advertisement, only the user assigning the ad to an asset
- PO is wrong:

“The user may, in an embodiment of the present invention, **drag-and-drop an advertisement** (such as may be displayed in advertisement preview window 430) into the particular advertising asset displayed in the environment window 440.”

Ex. 1009 (van Datta) at 8:20-24; Pet. 44

“[A]dvertisements will ... be displayed in various ‘tagged’ assets.”

Ex. 1009 (van Datta) at 8:20-24; Reply 18

Ground 4: Motivation to Combine Hays and van Datta (Claim 6)

Ground 4/Claim 6: Motivation to Combine

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

“A POSITA would have been motivated to incorporate these teachings from van Datta because of the well-known benefits in allowing a user to select which advertisements to display. As van Datta explains, in “a video game environment, the user may often dislike an advertisement selected automatically or at random, or may wish to customize the environment or game.” Ex. 1009, 1:56-59. Thus, “[m]any users have a genuine interest in a particular product or service, to the extent that they may wish to incorporate advertising content related to that product or service that they find appealing into their game or other digital environment.” Id., 2:1-4. Moreover, “advertisers spend considerable sums of money for the placement of advertising content in a particular game environment, and may be willing to pay more when they know that the user deems the content to be desirable.” Id., 2:5-8. A POSITA in seeking to improve Hays’s advertising system would be motivated by the fact that Van Datta’s teachings fulfill user needs for increased customization and advertiser needs for advertising the user finds desirable.”

Ex. 1003 (Zagal Decl.) at ¶157; Pet. 41

Ground 4/Claim 6: Motivation to Combine

- PO: Hays is agnostic to location, and so does not need a user to specify location (Sur-Reply 19)
- But Hays's advertisements are placed on ad units, each of which has a location

“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; Reply 18

“A system for playing computer or video games and displaying advertising to an audience playing the computer or video games ... wherein the processor is programmed ... to insert advertisements **into the advertising locations** under direction of the advertising presentation process”

Ex. 1005 (Hays) at cl. 1; Reply 19

Ground 4/Claim 6: Motivation to Combine

- PO: Hays is directed to broadcasting ads across platforms and games, van Datta is directed to narrowing its audience with customized advertisements
- Hays does not teach that ad customization is undesirable
- PO does not address Dr. Zagal's testimony:

“An 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 (Hays) at Abstract; Reply 19

“A POSITA in seeking to improve Hays's advertising system would be motivated by the fact that Van Datta's teachings fulfill user needs for increased customization and **advertiser needs for advertising the user finds desirable.**”

Ex. 1003 (Zagal Decl.) at ¶157; Reply 19

Ground 5: Levkovitz discloses “content being usable in the video game” (Claim 1)

Ground 5/Claim 1: “content being usable in the video game”

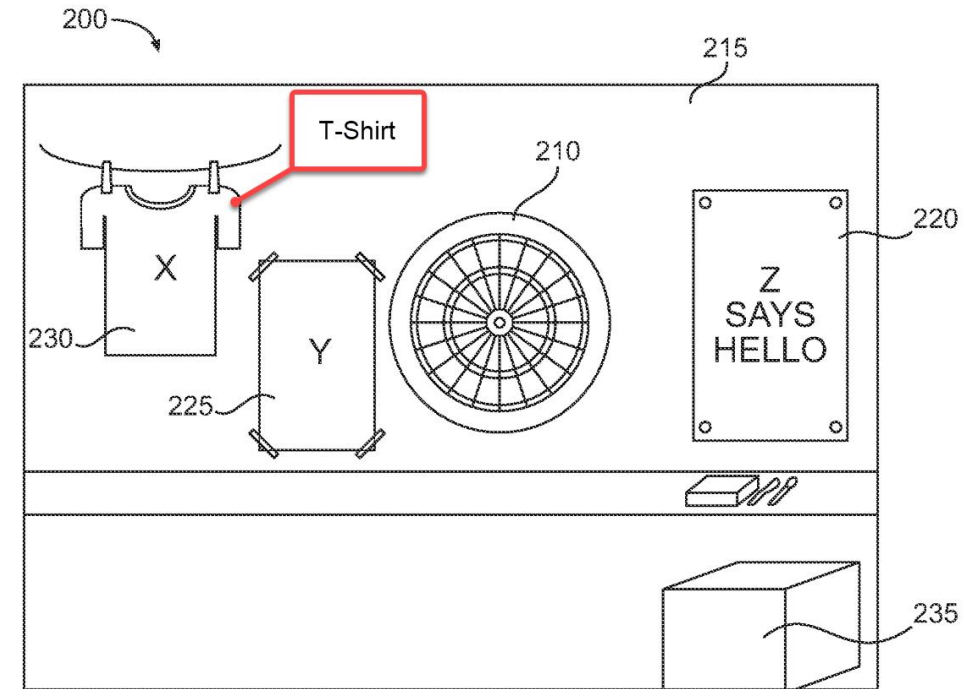
- PO argues that “usable” content must be narrowed by **seven** limitations:
 - Cannot be “skins” that are displayed (POR 14-15)
 - Must affect game play (POR 15)
 - Must alter game functionality (POR 15)
 - Must relate to in-game purchases (POR 16)
 - User must experience differences in the game (POR 16)
 - Cannot merely be content that is displayed or processed by code (POR 18)
 - Must allow interaction by the user (Sur-Reply 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

Ground 5/Claim 1: “content being usable in the 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 (202 patent) at 6:43-47, Fig. 2A; Reply 6



Ground 5/Claim 1: “content being usable in the 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 (202 patent) at 6:47-50, Fig. 2A; Reply 5

“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.”

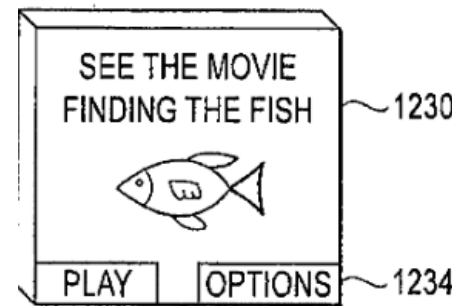
Ex. 1020, 26:3-18; Reply 5

Ground 5/Claim 1: “content being usable in the 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; Pet. 47



“The presentation of the advertisement within a game shows that the **content is usable** when the video game is operating on the mobile device.”

Ex. 1003 (Zagal Decl.) at ¶172; Pet. 47

Ground 5/Claim 1: “content being usable in the video game”

- Levkovitz’s pop-up ads are similar to 202 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; Pet. 47

- 202 patent’s 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 (202 patent) at 8:6-7; Reply 20

Ground 5/Claim 1: “content being usable in the video game”

- PO: Levkovitz similar to Gatto, which prosecution overcame
- Gatto disclosed emails with hyperlinks, and the examiner mapped “content” to the content “download[ed] **via** the hyperlink,” not the hyperlink itself

video game. In addition, Applicant notes that the “promotional items” identified by the Examiner are merely items available for download via hyperlink in the email. There is no indication that these promotional items are “usable in the video game.” Indeed, it would not make sense for an email to provide hyperlinks for content that is usable in the email itself.

Ex. 1002 (202 File History) at 188; Reply 7

- Applicant never argued claims require affect on game play or game functionality

Ground 5: Levkovitz discloses “uploading updated video-game content” (Claim 1)

Ground 5/Claim 1: “uploading updated video-game content”

- PO argues Levkovitz uses WAP, which does not use downloading or uploading content (Sur-Reply 21)
- WAP is only described embodiments starting with Figure 15

“FIG. 15 is a schematic illustration of a wireless communication system 1500 able to deliver targeted advertisements using Wireless Application Protocol (WAP) in accordance with some embodiments of the invention.”

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

- PO: WAP transmits content only for displaying, not for storage, and thus does not “update” any content (Sur-Reply 21)

Ground 5/Claim 1: “uploading updated video-game content”

- Levkovitz discloses a server **uploading** 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; Reply 21

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

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

Ground 5: Levkovitz discloses “tracking what has been uploaded” (Claim 5)

Ground 5/Claim 5: “tracking what has been uploaded”

- 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; Pet. 49

Ground 5/Claim 5: “tracking what has been uploaded”

- PO: Some content could be uploaded but not presented, and therefore not logged (POR 44-45)
- Claims do not require ***all*** uploaded content must be tracked
- Levkovitz does not indicate that it uploads any ads that are not presented

“[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; Pet. 49

Ground 5: Levkovitz discloses “displaying ... at a location based on user interaction” (Claim 6)

Ground 5/Claim 6: “displaying ... at a location based on user interaction”

- Levkovitz discloses modifying the size of ad (*i.e. **location of the ad***) based on user activity

“A third presentation rule may require, for example, that a first type of content item, e.g., an animated banner having a **size of 200 by 150 pixels**, be followed by a second type of content item, e.g., a textual or non-animated content item having a size of 60 by 40 pixels. A fourth presentation rule may require, for example, that **a certain content item be presented only when a pre-defined period of inactivity elapses**, e.g., a period in which the user of device 170 does not perform any operation, or a period in which no content items are presented.”

Ex. 1008 (Levkovitz) at ¶187; Pet. 49-50

“[A] triggering event may occur. For example, a level in the game may be completed, a goal or score in the game may be reached, the game may terminate, or the like. ... [F]irst advertisement may be presented in response to a first triggering event, or a second advertisement may be presented in response to a second (e.g., different) triggering event.

Ex. 1008 (Levkovitz) at ¶¶318-19; Pet. 49-50

Ground 5/Claim 6: “displaying ... at a location based on user interaction”

- PO: Size of the ad is not the location of the advertisement (POR 46)
 - The size of the ad determines which pixels display the advertisement (*i.e.* **location**)
- PO: Inactivity is not user interaction (POR 46)
 - Inactivity is a change from interaction to no interaction, and thus the advertisement is presented “based on user interaction”
 - Levkovitz also describes completing a level as a triggering event for displaying ad

“[A] triggering event may occur. For example, a level in the game may be completed, a goal or score in the game may be reached, the game may terminate, or the like.

Ex. 1008 (Levkovitz) at ¶187; Pet. 49-50

- PO: The size of the ad is not based on user inactivity (Sur-Reply 23)
 - Levkovitz expressly says user inactivity results in a “certain content item,” which could be a certain-sized advertisement

“[A] first type of content item, e.g., an animated banner having a size of 200 by 150 pixels, ... A fourth presentation rule may require, for example, that a certain content item be presented only when a pre-defined period of inactivity elapses”

Ex. 1008 (Levkovitz) at ¶187; Pet. 49-50

Ground 6: Levkovitz-Chu render obvious “in-game placement location” (Claim 4)

Ground 6/Claim 4: “Providing an in-game placement location”

- PO makes same arguments as Ground 3, argues that “in-game placement location” must be narrowed by **two** limitations:
 - Cannot be an indication of which game asset, but their specific location (POR 20)
 - Must be an X/Y coordinate (Sur-Reply 16)
- 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, as discussed in Ground 1

Ground 6/Claim 4: “Providing an 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; Pet. 39

“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; Pet. 39

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

Ex. 1007 (Chu) at Fig. 7; Pet. 39

Ground 6/Claim 4: “Providing an in-game placement location”

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

```

500 - <?xml version="1.0" encoding="UTF-8" ?>
    - <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>
      - <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; Pet. 39

Ground 6/Claim 4: “Providing an 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; Pet. 39

“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; Pet. 39

Ground 6/Claim 4: “Providing an 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 ¶¶186-87; Pet. 52-53

Ground 6/Claim 4: “Providing an in-game placement location”

- PO: Levkovitz serves ads broadly, Chu is focused on serving ads at a particular location (POR 50)
- 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)

Ground 6: Levkovitz-van Datta render obvious “location based on user interaction” (Claim 6)

Ground 7/Claim 6: “location based on user interaction”

- PO makes same arguments as Ground 5, argues “location” cannot be specifying the game asset, but their specific location (Surreply 18)
- PO argues that van Datta does not **display** the advertisement at the user-specified location (POR 37)
- PO is wrong:
 - Specification and Dr. Akl agree that the “location” can be the object, not just X-Y coordinate
 - Van Datta discloses a user “tagging” a video game element, and that element is designated to receive an advertisement
 - Van Datta clearly states that the advertisement is displayed once it is attached to the location designated to the user.

Ground 7/Claim 6: “location based on user interaction”

- PO’s “specific,” “XY coordinate” requirements for location read out embodiments from the ‘202 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.”

Ex. 1001 (202 Patent) at 12:28-32; Reply 9

“[T]he ‘202 [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; Reply 9

Ground 7/Claim 6: “location based on user interaction”

- Van Datta discloses displaying advertisements at locations based on a user dragging-dropping or tagging assets

“A system and method for placing an advertisement in a digital environment based upon a user's choice, subject to certain predetermined parameters, is disclosed.”

Ex. 1009 (van Datta) at Abstract; Pet. 43

“Certain objects in a digital medium such as a video game may be ‘tagged,’ these ‘tagged’ areas being subject to the insertion or placement of advertising content. For example, and as shown in FIG. 1A, the face of a billboard 100 may be ‘tagged’ (110) to indicate that an advertisement may be embedded in that location.”

Ex. 1009 (van Datta) at 2:59-64; Pet. 43

“The user may, in an embodiment of the present invention, drag-and-drop an advertisement (such as may be displayed in advertisement preview window 430) into the particular advertising asset displayed in the environment window 440.”

Ex. 1009 (van Datta) at 8:20-24; Pet. 44

Ground 7/Claim 6: “location based on user interaction”

- PO argues that van Datta does not **display** the advertisement, only the use assigning the ad to an asset
- PO is wrong:

“The user may, in an embodiment of the present invention, **drag-and-drop an advertisement** (such as may be displayed in advertisement preview window 430) into the particular advertising asset displayed in the environment window 440.”

Ex. 1009 (van Datta) at 8:20-24; Pet. 44

“[A]dvertisements will ... be displayed in various ‘tagged’ assets.”

Ex. 1009 (van Datta) at 8:20-24; Reply 18

Ground 7/Claim 6: “location based on user interaction”

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

“A POSITA would have been motivated to incorporate these teachings from van Datta because of the well-known benefits in allowing a user to select which advertisements to display. As van Datta explains, in “a video game environment, the user may often dislike an advertisement selected automatically or at random, or may wish to customize the environment or game.” Ex. 1009, 1:56-59. Thus, “[m]any users have a genuine interest in a particular product or service, to the extent that they may wish to incorporate advertising content related to that product or service that they find appealing into their game or other digital environment.” Id., 2:1-4. Moreover, “advertisers spend considerable sums of money for the placement of advertising content in a particular game environment, and may be willing to pay more when they know that the user deems the content to be desirable.” Id., 2:5-8.” A POSITA in seeking to improve Levkovitz’s advertising system would be motivated by the fact that Van Datta’s teachings fulfill user needs for increased customization and advertiser needs for advertising the user finds desirable.

Ex. 1003 (Zagal Decl.) at ¶196; Pet. 56

Ground 7/Claim 6: “location based on user interaction”

- PO: van Datta’s selection of ad location is “inherently distinct” from Levkovitz
- PO provides no explanation for how the references are distinct, nor does PO assert they are not analogous art
- Dr. Zagal testified that the references are analogous to the ‘202 patent

“[T]he ’202 patent [is] directed to delivering updated content, such as advertisements, to video games. Van Datta is also directed to the same subject matter. See Ex. 1009, 3:5-7 (“[D]ynamic advertising content may be pushed or pulled into the video game ... via, for example, an end-user client and/or advertising server.”).

Ex. 1003 (Zagal Decl.) at ¶155; Pet. 140-41

“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 (Zagal Decl.) at ¶184; Pet. 52

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 (POR 11-12)
- The Board already rejected this argument:

“Patent Owner contends that Dr. Zagal’s Declaration “simply parrots the Petition” and, thus, should not be entitled to any weight. Prelim. Resp. 28–33. The testimony quoted by Patent Owner (Prelim. Resp. 30–32) includes citations to the prior art to support the opinions set forth and, thus, “disclose[s] the underlying facts or data on which the opinion is based” (37 C.F.R. § 42.65(a)). See Ex. 1003 ¶¶ 95, 103, 118, 165–166 (citing Ex. 1005 ¶¶ 25, 51; Ex. 1008 ¶¶ 5, 6, 123, 127). We decline, at this stage of the proceeding, to discount Dr. Zagal’s testimony in its entirety and will give that testimony the appropriate weight on the points for which it is offered.”

Paper 9 (ID) at 7 n.1

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 (POR 53)
 - But undisputed there existed mobile gaming consoles, like the PSP
 - Long-felt need: in-game advertising was desirable (POR 54-55)
 - Every prior art reference describes in-game advertising
 - Teach away: developers could not update content before the 202 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)