

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

HOME DEPOT U.S.A., INC.,
Petitioner

v.

H2 INTELLECT LLC,
Patent Owner

Inter Partes Review No.: IPR2025-00480

**PETITION FOR INTER PARTES REVIEW OF
U.S. PATENT NO. 8,433,296**

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[11.d] at least one instruction to receive, from a sponsor, a request to obtain an interest in a selected one of the plurality of geographic areas;

[11.e] at least one instruction to provide the sponsor a response to the request;

[11.f] at least one instruction to store a record of the interest in the selected one of the plurality of geographic areas;

[11.g] at least one instruction to receive, from the sponsor, content to be delivered to registered application programs having target locations contained within the selected one of the plurality of geographic areas;

[11.h] at least one instruction to receive a request from a registered application program for content to be used within the registered application program;

[11.i] at least one instruction to select content associated with at least one of the plurality of sponsors, to be delivered to the registered application program of a specific type, in accordance with a content delivery reservation associating the at least one sponsor with a geographic area and a registered application program type; and

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1001	U.S. Patent No. 8,433,296 (the “296 patent”).
1002	Declaration of David H. Williams.
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1004	U.S. Patent App. Pub. No. 2006/0149630 (“ Elliott ”).
1005	U.S. Patent App. Pub. No. 2002/0161633 (“ Jacob ”).
1006	File History of U.S. Pat. No. 11,948,171.
1007	U.S. Patent No. 6,108,650 (“ Musk ”).
1008	<i>H2 Intellect LLC v. The Home Depot, Inc., et al.</i> , Infringement Contentions, November 1, 2024.
1009	Macromedia Dreamweaver UltraDev Support Center - Defining Dynamic Content, https://web.archive.org/web/20060715033222/https://www.adobe.com/support/ultradev/content/url_parameters/url_parameters04.html (Jul. 15, 2006).
1010	U.S. Patent App. Pub. No. 2003/0142631 (“ Silvester ”).
1011	U.S. Patent App. Pub. No. 2007/0088852 (“ Levkovitz ”).
1012	U.S. Patent App. Pub. No. 2008/0032703 (“ Krumm ”).
1013	Apple launches official iPhone, iPod touch Web apps directory. https://appleinsider.com/articles/07/10/11/apple_launches_official_iphone_ipod_touch_web_apps_directory (Oct. 11, 2007).
1014	Five Killer Apps for Palm Centro (and Treo) Smartphones. https://www.cbsnews.com/news/five-killer-apps-for-palm-centro-and-treo-smartphones/ (Oct. 1, 2007).
1015	<i>H2 Intellect LLC v. The Home Depot, Inc., et al.</i> , Infringement Contentions, Exhibit A, November 1, 2024.
1016	Papers of H. Bentley Hahn: The Man Who Invented the 5-Digit ZIP Code. https://jfk.blogs.archives.gov/2021/07/01/papers-of-h-bentley-hahn-the-man-who-invented-the-5-digit-zip-code/ (July 1, 2021).
1017	Geofencing, Techopedia, https://www.techopedia.com/definition/14937/geofencing (last visited February 10, 2025).
1018	Jonathan P. Munson & Vineet K. Gupta, Location-Based Notification as a General-Purpose Service, Proceedings of the 2nd International Workshop on Mobile Commerce 40 (2002).

Exhibit No.	Description
1019	What We Do, Locating What's Important To You, Cell-Loc, http://web.archive.org/web/20030411221815/http://cellloc.com/what_locating.html (last visited February 10, 2025).
1020	Alan Cohen, "Location, Location, Location," PC Mag., available at https://books.google.com/books?id=eIvagv988JgC&pg=PA82#v=onepage&q&f=false (last visited February 10, 2025).
1021	U.S. Patent No. 7,133,685.
1022	U.S. Patent No. 7,164,986.
1023	U.S. Patent No. 8,536,999.
1024	U.S. Patent Publication No. US 2008/0094256.
1025	U.S. Patent No. 8,010,134.
1026	U.S. Patent Publication No. US 2006/0116817.
1027	U.S. Patent No. 10,380,636.
1028	Get parameters in url, https://www.drupal.org/forum/support/module-development-and-code-questions/2007-10-03/get-parameters-in-url (Oct. 3, 2007).

CHART OF CLAIMS	
[1.pre]	A method comprising:
[1.a]	registering a plurality of application programs for use with a content delivery platform, wherein the plurality of registered application programs are each associated with at least one application program type;
[1.b]	establishing a plurality of perimeters defining a plurality of geographic areas;
[1.c]	reserving delivery of content from a plurality of sponsors to the plurality of registered application programs on the basis of both a geographic area and an application program type associated with each of the plurality of registered application programs;
[1.d]	receiving, from a sponsor, a request to obtain an interest in a selected one of the plurality of geographic areas;
[1.e]	providing the sponsor a response to the request;
[1.f]	storing a record of the interest in the selected one of the plurality of geographic areas;
[1.g]	receiving, from the sponsor, content to be delivered to registered application programs having target locations contained within the selected one of the plurality of geographic areas;
[1.h]	receiving, from a registered application program, a request for content to be used within the registered application program;
[1.i]	in response to receiving the request: selecting content from at least one sponsor to be delivered to the registered application program, subject to the reserving; and
[1.j]	[in response to receiving the request:...] providing the content from the at least one sponsor to the registered application program.
[2.pre]	The method of claim 1, further comprising:
[2.a]	recording a request identifier associated with the request; and
[2.b]	providing the request identifier to the registered application program.
[3.pre]	The method of claim 2, further comprising:
[3.a]	receiving information related to user interaction with the provided content, the information including the request identifier; and
[3.b]	providing additional content to the registered application in response to the received information.
[4.pre]	The method of claim 1, further comprising:
[4.a]	determining whether at least one of the plurality of sponsors is associated with a geographical representation lying at least partially within a predetermined radial distance of a target location;

CHART OF CLAIMS	
[4.b]	in response to a negative determination, increasing the predetermined radial distance.
[5.pre]	The method of claim 1, further comprising:
[5.a]	reserving a specific one of the plurality of geographic areas for exclusive delivery of content associated with a particular one of the plurality of sponsors to registered application programs and having a target location contained within the specific one of the plurality of geographic areas.
[6.pre]	A system comprising:
[6.a]	memory;
[6.b]	a communications interface operably coupled to the memory; and
[6.c]	at least one processor operably coupled to the memory and the communications interface, the processor configured to execute a program of instructions, the program of instructions comprising:
[6.d]	at least one instruction to register a plurality of application programs for use with a content delivery platform, wherein the plurality of registered application programs are each associated with at least one application program type;
[6.e]	at least one instruction to establish a plurality of perimeters defining a plurality of geographic areas;
[6.f]	at least one instruction to maintain at least one record indicating content delivery reservations associating each of a plurality of sponsors with specific registered application program types and at least one of the plurality of geographic areas;
[6.g]	at least one instruction to receive, from a sponsor, a request to obtain an interest in a selected one of the plurality of geographic areas;
[6.h]	at least one instruction to provide the sponsor a response to the request;
[6.i]	at least one instruction to store a record of the interest in the selected one of the plurality of geographic areas;
[6.j]	at least one instruction to receive, from the sponsor, content to be delivered to registered application programs having target locations contained within the selected one of the plurality of geographic areas;
[6.k]	at least one instruction to receive a request from a registered application program for content to be used within the registered application program;
[6.l]	at least one instruction to select content associated with at least one of the plurality of sponsors, to be delivered to the registered application program of a specific type, in accordance with a content delivery reservation associating the at least one sponsor with a geographic area and a registered application program type; and

CHART OF CLAIMS
[6.m] at least one instruction to provide the selected content to the registered application program.
[7.pre] The system of claim 6, wherein the program of instructions further comprises:
[7.a] at least one instruction to record a request identifier associated with the request; and
[7.b] at least one instruction to provide the request identifier to the registered application program.
[8.pre] The system of claim 7, wherein the program of instructions further comprises:
[8.a] at least one instruction to receive information related to user interaction with the provided content, the information including the request identifier; and
[8.b] at least one instruction to provide additional content to the registered application in response to the received information.
[9.pre] The system of claim 6, wherein the program of instructions further comprises:
[9.a] at least one instruction to determine whether at least one of the plurality of sponsors is associated with a geographical representation lying at least partially within a predetermined radial distance of a target location; and
[9.b] at least one instruction to increase the predetermined radial distance in response to the at least one instruction to determine.
[10.pre] The system of claim 6, wherein the program of instructions further comprises:
[10.a] at least one instruction to reserve a specific one of the plurality of geographic areas for exclusive delivery of content associated with a particular one of the plurality of sponsors to registered application programs and having a target location contained within the specific one of the plurality of geographic areas.
[11.pre] A non-transitory computer readable medium tangibly embodying a program of computer executable instructions, the program of instructions comprising:
[11.a] at least one instruction to register a plurality of application programs for use with a content delivery platform, wherein the plurality of registered application programs are each associated with at least one application program type;
[11.b] at least one instruction to establish a plurality of perimeters defining respective geographic areas;

CHART OF CLAIMS
[11.c] at least one instruction to maintain at least one record indicating content delivery reservations associating each of a plurality of sponsors with specific registered application program types and at least one of the plurality of geographic areas;
[11.d] at least one instruction to receive, from a sponsor, a request to obtain an interest in a selected one of the plurality of geographic areas;
[11.e] at least one instruction to provide the sponsor a response to the request;
[11.f] at least one instruction to store a record of the interest in the selected one of the plurality of geographic areas;
[11.g] at least one instruction to receive, from the sponsor, content to be delivered to application programs having target locations contained within the selected one of the plurality of geographic areas;
[11.h] at least one instruction to receive a request from a registered application program for content to be used within the registered application program;
[11.i] at least one instruction to select content associated with at least one of the plurality of sponsors to be delivered to the registered application program of a specific type, in accordance with a content delivery reservation associating the at least one sponsor with a geographic area and a registered application program type; and
[11.j] at least one instruction to provide the selected content to the registered application program.
[12.pre] The non-transitory computer readable medium of claim 11, wherein the program of instructions further comprises:
[12.a] at least one instruction to record a request identifier associated with the request; and
[12.b] at least one instruction to provide the request identifier to the registered application program.
[13.pre] The non-transitory computer readable medium of claim 12, wherein the program of instructions further comprises:
[13.a] at least one instruction to receive information related to user interaction with the provided content, the information including the request identifier; and
[13.b] at least one instruction to provide additional content to the registered application in response to the received information.
[14.pre] The non-transitory computer readable medium of claim 11, wherein the program of instructions further comprises:
[14.a] at least one instruction to determine whether at least one of the plurality of sponsors is associated with a geographical representation lying at least partially within a predetermined radial distance of a target location; and

CHART OF CLAIMS
[14.b] at least one instruction to increase the predetermined radial distance in response to a negative determination.
[15.pre] The non-transitory computer readable medium of claim 11, wherein the program of instructions further comprises:
[15.a] at least one instruction to reserve a specific one of the plurality of geographic areas for exclusive delivery of content associated with a particular one of the plurality of sponsors to application programs and having a target location contained within the specific one of the plurality of geographic areas.

I. INTRODUCTION

Home Depot U.S.A., Inc. (“Petitioner”) petitions for inter partes review of U.S. Patent No. 8,433,296 (the “296 patent”) (EX1001). As shown below, the systems and methods described in the 296 patent were known in the art.

II. STATEMENT OF PRECISE RELIEF REQUESTED

In accordance with 35 U.S.C. §311, Petitioner requests cancelation of claims 1-15 of the 296 patent in view of the following grounds:

Ground	Claims	Stat. Basis	Prior Art
1	1-3, 5-8, 10-13, 15	§103	Elliott in view of Jacob
2	4, 9, 14	§103	Elliott in view of Jacob and Musk

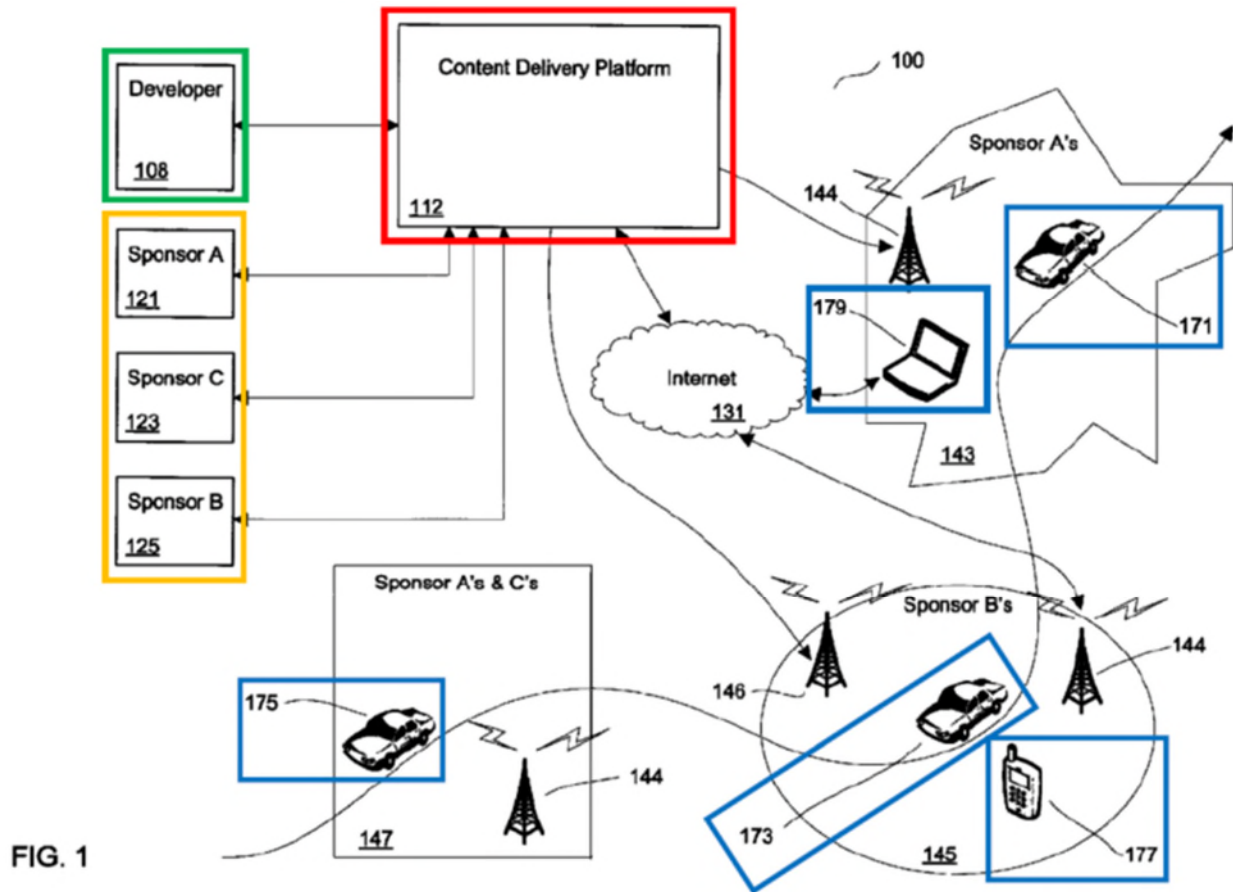
III. THE 296 PATENT

A. Overview of the 296 Patent

The 296 patent issued from U.S. Patent Application No. 12/434,094, filed May 1, 2009. In their infringement contentions, Patent Owner (“PO”) asserts that the 296 patent is entitled to a priority date earlier than the May 1, 2009 filing date, specifically, March 11, 2008. EX1008, 4. Although Petitioner does not concede that the 296 patent is entitled to a priority date, for the purposes of this petition, the Petitioner assumes a March 11, 2008 priority date.

The 296 patent describes a content delivery system that delivers content to applications executing on mobile devices based on locations associated with the

mobile devices. EX1001, 1:36-2:17, 2:44-54. Figure 1 illustrates the basic architecture of the system, including a content delivery platform 112 (red), developer platform 108 (green), one or more sponsors (e.g., sponsors 121, 123, 125) (yellow), and devices (blue):



EX1001, FIG. 1 (annotated), 3:30-50. The operator of the content delivery platform establishes geographic areas, which a sponsor can reserve via the content delivery platform for delivery of content associated with that sponsor to a particular application on the mobile device. EX1001, Abstract, 3:11-22. When the mobile device enters a sponsor's reserved geographic area, the content delivery

platform delivers the sponsor's content to the application on the mobile device.

EX1001, Abstract, 3:211-22. EX1002, ¶75.

B. Overview of the 296 patent's File History

During prosecution, the Examiner issued Office Actions rejecting the pending claims under 35 U.S.C. §101 and §102/§103 in view of Gupta. EX1003, 173-183, 115-129, 48-63. In response, Applicant filed responses amending the claims. EX1003, 157-169, 98-104, 32-44. The Examiner then issued a notice of allowance, which included an examiner's amendment. EX1003, 15-26. EX1002, ¶¶76-78.

C. Person of Ordinary Skill in the Art

A person of ordinary skill in the art at the time of the alleged invention of the 296 patent (March 11, 2008) ("POSITA") would have had a Bachelors' degree in electrical or computer science or a comparable field of study, plus at least three years of professional experience in advertisement delivery systems or other relevant industry experience. Additional graduate education could substitute for professional experience, and significant experience in the field could substitute for formal education. EX1002, ¶79.

D. Claim Construction

The Challenged Claims are interpreted using the same claim construction standard that is used to construe the claim in a civil action in federal district court. 37 C.F.R. §42.100(b). Petitioner does not contend that its proposed constructions

are complete constructions of these limitations or the claims for any other purpose, including for issues that have been raised in the related litigation. Because the prior art asserted herein discloses the preferred embodiment within the indisputable scope of the claims, the Board need not construe the outer bounds of the claims as part of these proceedings. Any claim terms not listed below should be construed according to their plain and ordinary meaning to a POSITA at the time of the 296 patent.

1. “reserving” (claims 1, 6, 11)

A POSITA would have understood “reserving” to include making an exclusive or non-exclusive reservation. EX1001, 2:49-51 (“Sponsors can reserve an exclusive interest, or in some embodiments, a semi-exclusive interest, in a geographic area”), 3:21-22 (“the reserved interest can be either completely exclusive, or semi-exclusive”), 9:9-11 (“if an area selected for exclusive or semi-exclusive content delivery is available, the selected geographic area can be reserved for the sponsor”). EX1002, ¶81.

2. “subject to the reserving” (claim 1)

Claim 1 includes the limitation “reserving delivery of content from a plurality of sponsors to the plurality of registered application programs on the basis of both a geographic area and an application program type associated with each of the plurality of registered application programs.” This limitation provides

antecedent basis for “selecting...subject to the reserving” limitation. Therefore, the phrase “subject to the reserving” means that the content is selected on the basis of both a geographic area and an application type. EX1002, ¶82.

3. “a request to obtain an interest” (claims 1, 6, 11)

A POSITA would have understood this limitation to include a request for a reservation (exclusive or non-exclusive).” EX1001, 8:24-32. EX1002, ¶83.

4. “the plurality of registered application programs are each associated with at least one application program type” (claims 1, 6, 11)

A POSITA would have understood “associated with” to mean that each of plurality of application programs may be classified as “at least one application type.” The only discussion of an “application type” in the specification describes the application as being at least one type of application; there is no written description of an overt act of associating each application with at least one application type or any explanation of how applications are associated with an application type. EX1001, 9:5-8 (“In some embodiments, overlap of various sponsor areas may be allowed based on type of business, type of application used to deliver the content, or otherwise”), 5:13-15 (“sponsors can advertise or provide other content to members of particular demographics based on a type of application a particular demographic is more likely to use”). EX1002, ¶84.

5. “registering” (claims 1, 6, 11)

The 296 patent uses “registering” or a form thereof numerous times without providing a specific definition. The 296 patent does, however, provide context from which the meaning of “registering” can be ascertained:

Various embodiments disclosed herein include registering an application program for use with a content delivery platform, establishing multiple perimeters defining respective geographic areas, and maintaining records associating sponsors with particular geographic areas. The content delivery platform can receive a request from a registered application program for content to be displayed on a mobile device, and the request can be used to determine a target location.

EX1001, 1:36-43.

In some embodiments, a registered application program is provided to mobile devices by developer platform 108, content delivery platform 112, one of sponsor A 121, sponsor C 123, or sponsor B125, or by another desired delivery mechanism. In some embodiments, registering the application program with content delivery platform 112 allows developer 108 to receive revenue from sponsor A 121, sponsor C 123, or sponsor B 125 for content displayed on a mobile device located within, or in proximity to, a geographical area reserved by one or more of the sponsors.

EX1001, 3:1-10; EX1002, ¶85.

From this context, a POSITA would have understood “registering” to mean something akin to “enrolling,” *i.e.*, recording identifying information for the application that facilitates providing content to and/or tracking the usage of the application. This would be especially important, for example, in any sort of advertising-related business model. EX1002, ¶86.

6. “providing the sponsor a response to the request” (claims 1, 6, 11)

A POSITA would have understood that “a response” is a response that can be provided in direct or indirect response to the request [for a reservation]. The “response” must occur after the request. EX1002, ¶87.

7. “recording a request identifier associated with the request” (claims 2, 7, 12)

It is not clear from the claim whether “the request” refers back to “a request to obtain an interest” in limitation 1.d or “a request for content” in limitation 1.h. Petitioner addresses both possible constructions below. EX1002, ¶88.

During prosecution of the U.S. Patent No. 11,948,171, which is a continuation of the 296 patent, the Applicant defined an identifier as “a string of characters used to identify an element of a computer program such as a variable, a data structure, a procedure, a statement, a higher-level unit, or the program itself.” EX1006, 204. That lexicography is consistent with the plain meaning of that term, and should be adopted. *Microsoft Corp. v. Multi-Tech Systems, Inc.*, 357 F.3d

1340. 1350 (Fed. Cir. 2004) (“we conclude that Multi-Tech’s statements made during the prosecution of the ’627 patent with regard to the scope of its inventions as disclosed in the common specification are not only relevant to the ’627 and ’532 patents, but also to the earlier issued ’649 patent”). EX1002, ¶89.

E. PO’s Infringement Contentions

“[P]atent owners may not, like a ‘nose of wax,’ twist the meaning of patent claims one way to avoid a finding of unpatentability and in another way so as to find infringement.” *Ericsson Inc. v. Intell. Ventures II LLC*, IPR2014-00919, Paper 37 at 9 (PTAB Dec. 7, 2015). In this regard, PO’s infringement allegations are “probative” of whether PO is taking “inconsistent positions” between this proceeding and district court litigation and are “relevant of the credibility” of PO’s “characterization of the [asserted] Patent in this proceeding.” *Id.* at 9-10; *Square, Inc. v. Unwired Planet LLC*, IPR2014-01164, Paper 28 at 37-38 (PTAB Nov. 19, 2015). Accordingly, Petitioner includes PO’s initial infringement contention for the 296 patent (EX1015) from the *H2 Intellect LLC v. The Home Depot, Inc.* case referenced below.

IV. GROUND 1: CLAIMS 1-3, 5-8, 10-13, 15 ARE OBVIOUS OVER ELLIOTT IN VIEW OF JACOB

A. Overview of Elliott

U.S. Patent Appl. Pub. No. 2006/0149630 (“Elliott”) was filed November 16, 2005, and published July 6, 2006. EX1004, cover page. Elliott is prior art under 35 U.S.C. §§102(a), (b), and (e) (pre-AIA). EX1002, ¶91.

Elliott generally relates to systems and methods for delivering advertisements to mobile devices. EX1004, ¶3, ¶9. Figure 1 reproduced below broadly illustrates the core components of Elliott’s system:

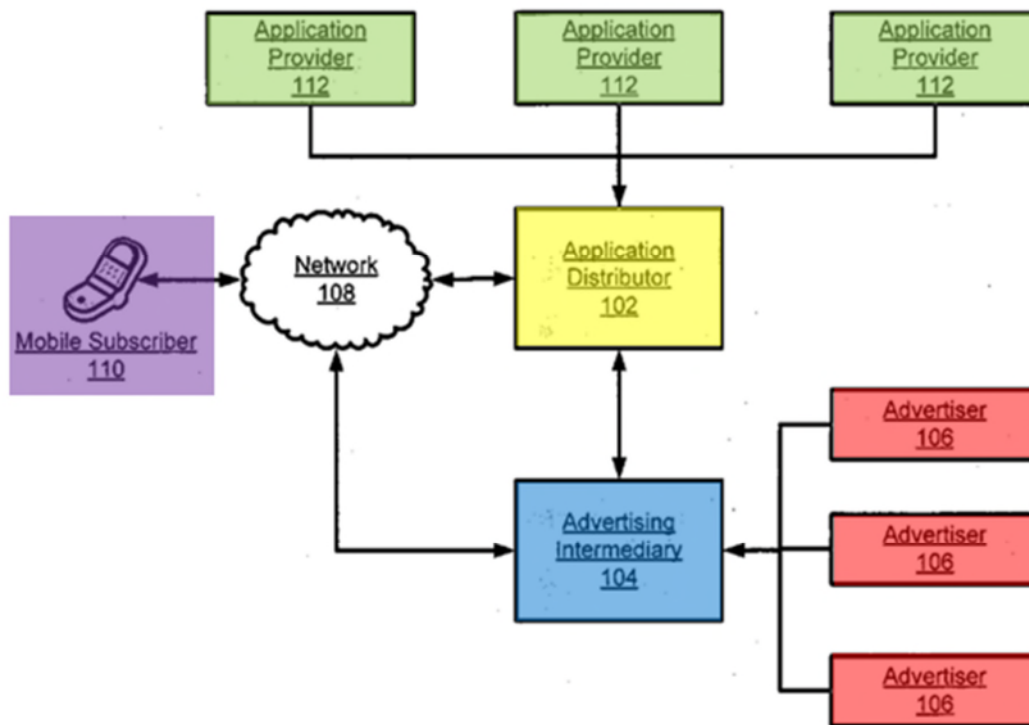


Fig. 1

EX1004, FIG. 1 (annotated). As shown, Elliott's system generally includes a plurality of advertisers 106 (red), an advertising intermediary 104 (blue), a plurality of application providers 112 (green), an application distributor 102 (yellow), and a mobile subscriber 110 (purple). EX1004, ¶13. Each of the plurality of advertisers 106 provides advertisements to advertising intermediary 104 for delivery to mobile subscriber 110. EX1004, ¶13. Each of the plurality of application providers 112 provides applications to application distributor 102 for delivery to mobile subscriber 110. EX1004, ¶13. Application provider 112 may provide application distributor 102 with one of the advertisements for delivery to the mobile subscriber 110. EX1002, ¶92.

Elliott's advertising intermediary 104 receives advertisements from advertisers 106 along with targeting information that specifies advertisers' 106 "preference[s] for which demographic should receive each advertisement." EX1004, ¶15. Advertising intermediary 104 stores the advertisements in advertisement database 206 along with the targeting information. EX1004, ¶15. Advertising intermediary 104 also includes a subscriber database 208 that stores account information for each mobile phone service subscriber 110. EX1004, ¶16 ("Account information...includes an e-mail address, physical address or telephone number..., the user's name, and other contact information" as well as "demographic information about the subscriber" and "preferences about the kinds

of advertisements the subscriber wishes to receive”). Advertising intermediary includes an advertisement selection engine 202 which “matches advertisements in advertisement database 206 with subscriber information in subscriber database 208, choosing the most desirable advertisements to show to each subscriber based both on the advertiser’s specified target demographic for the advertisement and on the subscriber’s indicated preferences for advertisements.” EX1004, ¶17. EX1002, ¶93.

Elliott is analogous art to the 296 patent and was not considered during prosecution of the 296 patent. EX1002, ¶¶94-95.

B. Overview of Jacob

Jacob was filed on April 27, 2001, and published on October 31, 2002. EX1005, cover page. Jacob is prior art under at least 35 U.S.C. §§102(a), (b), and (e) (pre-AIA). EX1002, ¶96.

Jacob discloses an advertising system based on a user’s location. EX1005, Abstract. As shown in the annotated Figure 1 below, the system includes information providers (red) such as advertisers 119, 121 who send information through a service provider 123 (green) to a consumer’s communications unit 103, 105, which can be a mobile device. EX1005, Abstract.

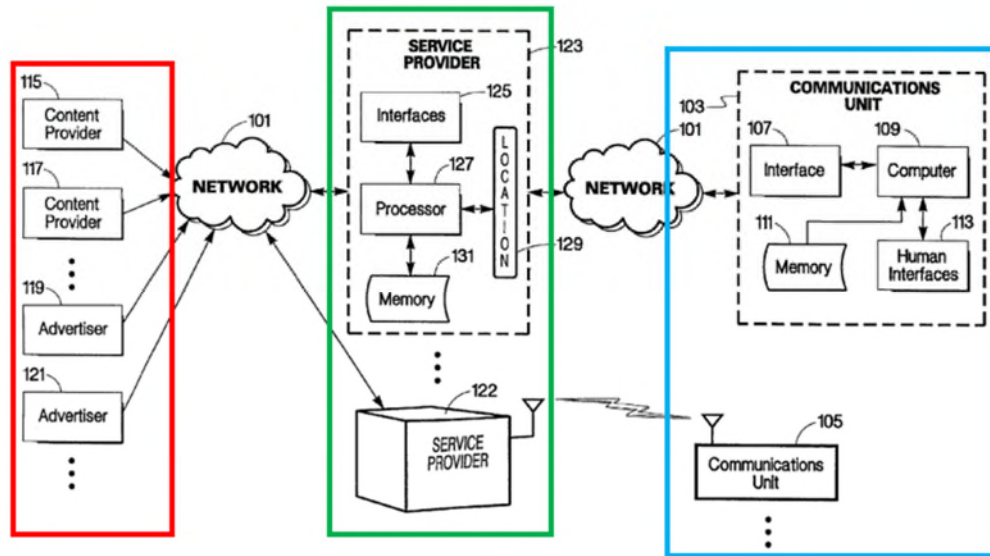


Fig. 1

EX1005, Fig. 1, ¶23. EX1002, ¶97.

Along with advertisements, advertiser 119 sends “attributes” for advertising effectiveness, such as a business category, *e.g.*, “restaurant,” and a defined location for the advertisement to be sent, *e.g.*, “local address and ZIP code(s) (i.e., local market).” EX1005, ¶28. The service provider stores advertisements and advertisement attributes corresponding to the advertisements. EX1005, ¶22. One of the advertisement attributes includes geographic location. EX1005, ¶27 (“The significance of the geographic location can be the physical presence of an advertiser’s place of business or a general geographic area in which the advertiser believes the target advertisement recipient should be located for optimum value of the advertisement”), ¶28 (“Jane’s identifies the following attributes for her pancake house: 1) restaurant and 2) local address and ZIP code(s) (i.e., local market)”). EX1002, ¶98.

In operation, the communications unit 103, 105 sends location information to the service provider 122, 123. EX1005, ¶¶29, ¶32. The service provider 122, 123 converts the information to a format to enable a match with the aforementioned location “attributes.” *Id.* Then, the service provider 122, 123 matches the location attributes between advertiser 119 and a communications unit 103, 105 and sends the associated advertisement to the communications unit 103, 105. EX1005, ¶¶29-30, ¶32. EX1002, ¶99.

Jacob is analogous art to the 296 patent and was not considered during prosecution of the 296 patent. EX1002, ¶¶100-101.

C. Motivation to Combine

A POSITA would have been motivated to modify the teachings of Elliott (§IV(A)) based on the teachings of Jacob (§IV(B)) because Elliott teaches targeting information provided with advertisements that specifies an advertiser’s 106 “preference[s] for which demographic should receive each advertisement,” and Jacob discloses a means “to better provide content-subsidized advertising [that is] useful to a user” by taking into account “the significance of the user’s location relative to the pertinent location of the advertising...when the advertising is delivered to the user” in the form of a geographic location advertisement attribute. EX1004, ¶15, ¶17 (“choosing the most desirable advertisements to show to each subscriber based both on the advertiser’s specified target demographic for the

advertisement and on the subscriber's indicated preferences for advertisements"); EX1005, ¶17. A POSITA would have been motivated by the teachings of Jacob to implement Jacob's geographic location advertisement attribute with Elliott's targeting information to further individualize "content tailored to the expressed preferences of a person." EX1005, ¶3. Such a combination involves a simple addition of one known element (Jacob's geographic location advertisement) with other similar elements (*e.g.*, Elliott's targeting information) to obtain predictable results (providing advertisers with the ability to define the geographic area for delivering advertisements). Accordingly, a POSITA would have had a reasonable expectation of success in making the proposed combination given the teachings of Elliott and Jacob. Such a combination would have required minimal modifications to Elliott to implement Jacob's geographic location advertisement attribute, and thus would have been well within the skillset of a POSITA. The proposed combination would not have required undue experimentation and would have yielded a predictable result. EX1002, ¶102.

If PO argues the portions of Elliott or Jacob cited below relate to different, incompatible embodiments (they do not), it would have been obvious to a POSITA to combine such embodiments into a single system for providing the ability to deliver advertisements at least because such embodiments are described in the

same prior art reference, are fully compatible with each other, and could be combined with minimal effort to achieve predictable results. EX1002, ¶103.

D. Claim 1

Elliott renders this claim obvious, alone or in combination with Jacob. EX1002, ¶104.

1. [1.pre] A method comprising:

Elliott-Jacob combination discloses *a method* (methods for delivering advertisements to mobile devices). EX1004, ¶3 (“The present invention relates generally to delivery of advertisements on mobile devices”), ¶27; EX1005, ¶1. EX1002, ¶105.

2. [1.a] registering a plurality of application programs for use with a content delivery platform, wherein the plurality of registered application programs are each associated with at least one application program type;

Elliott discloses and renders obvious *registering a plurality of application programs for use with a content delivery platform* (collectively, application distributor 102 and advertising intermediary 104), *wherein the plurality of registered application programs are each associated with at least one application program type* (e.g., video game). EX1004, ¶13, ¶¶18-19, ¶27; §III(D)(4) (construction of “the plurality of registered application programs are each associated with at least one application program type”), §III(D)(5) (construction of “registering”). EX1002, ¶106.

Elliott discloses a *content delivery platform* (i.e., application distributor 102 and advertising intermediary 104), which collectively delivers content (i.e., application programs and advertisements) to mobile devices. EX1004, ¶18 (“Application distributor 102 distributes mobile applications provided by application providers 112 to mobile subscribers 110”), ¶13 (“Application distributor 102...distributes both applications and advertisements over a network 108 to a mobile device 110”), ¶27 (“When an application requests an advertisement from application distributor 102, application distributor 102 transmits 304 data to advertising intermediary 104 about which subscriber is using which application...advertisement selection engine 202 of advertisement intermediary 104 selects an appropriate advertisement and transmits 306 the selected advertisement back to application distributor 102” which “then forwards 308 the advertisement to mobile subscriber 110”). Elliott’s application distributor 102 and advertisement intermediary 104 work collectively to deliver advertisements and operate under the control of the same entity. EX1004, ¶19 (“Alternatively, application distributor 102 may be the same business entity as advertising intermediary 104”). EX1002, ¶107.

Elliott discloses or renders obvious *registering a plurality of application programs* (mobile applications from application provider 112) *for use with the content delivery platform* (application distributor 102, application intermediary

104). EX1004, ¶13, ¶18 (“Application distributor 102 distributes mobile applications provided by application providers 112 to mobile subscribers 110”). Specifically, Elliott discloses that the application provider receives revenue from sponsors (“advertising revenue”) based on advertising provided to mobile applications via a content delivery platform, which indicates that the mobile application was registered or enrolled with that content delivery platform to enable the provision of revenue to the application provider. EX1004, ¶18 (“In one embodiment, application distributor 102 provides a portion of its advertising revenue to an application provider 112 in exchange for the application provider 112 allowing application distributor 102 to distribute its product”), ¶13 (“Application distributor 102...distributes both applications and advertisements over a network 108 to a mobile device 110”), ¶18 (“Advertising content is typically provided over the network 108 after the application is installed on the mobile device”), ¶27 (“When an application requests an advertisement from application distributor 102, application distributor 102 transmits 304 data to advertising intermediary 104 about which subscriber is using which application”);§III(D)(5) (construction of “registering”). EX1002, ¶108.

Further, a POSITA would have understood that Elliott’s disclosure of the application distributor 102 receiving the mobile applications from application providers 112 indicates *registering* the mobile applications *for use with* application

distributor 102 and advertising intermediary 104. The application distributor 102 facilitates receiving a request for content and providing the content to mobile applications based on the application requesting the advertisement, which a POSITA would have understood to include and render obvious registering the application with the application distributor 102. EX1004, ¶13 (“Application distributor 102...distributes both applications and advertisements over a network 108 to a mobile device 110”), ¶18 (“Advertising content is typically provided over the network 108 after the application is installed on the mobile device, however in the alternative some or all advertising content can also be pre-built into the application”), ¶27 (“When an application requests an advertisement from application distributor 102, application distributor 102 transmits 304 data to advertising intermediary 104 about which subscriber is using which application”). EX1002, ¶109.

Further, Elliott’s application programs *are each associated with at least one application program type*. EX1004, ¶18 (“Many types of mobile applications exist, including games, shopping applications, social networking applications, mapping applications, etc.”), ¶14 (“an advertiser may be interested in sponsoring a video game played using the mobile device”); §III(D)(4) (construction of “the plurality of registered application programs are each associated with at least one application program type”). Each of “games, shopping applications, social networking

applications, [and] mapping applications” identify an *application program type* associated with an application program. EX1004, ¶18. Thus, a POSITA would have understood Elliott to disclose that application programs are associated with application program types. Moreover, POSITA would have understood it was well-known that different *application programs* would have been *associated with application program types*. See e.g., EX1011, ¶99 (“a first ad server 150 may serve content items directed for presentation using a first type of applications 176 (e.g., games), whereas a second ad server 150 may serve content items directed for presentation using a second type of applications 176 (e.g., utility applications)”). EX1002, ¶110.

Moreover, in their infringement contentions, PO is vague regarding what they allege to be an *application program type*. EX1015, 6-10. First, it appears that PO equates an iOS version of an application to a first application program type and an Android version of the application to a second application program type. EX1015, 6-10. A POSITA would have understood that, as of the time of the alleged invention of the 296 patent, it was well-known that companies developed applications that were compatible with different types of smartphone devices. EX1013 (discussing Apple requiring developers to “focus their developmental efforts on Web 2.0 applications that function only under the embedded version of its Safari browser”); EX1014 (discussing “thousands of third-party applications”

that can be installed on Palm Centro smartphone). Thus, a POSITA would have understood and found it obvious that each application in Elliott would be associated with an application type, based on the operating system it is compatible with. EX1002, ¶111.

Second, it appears that PO in its infringement contentions equates a first application (“The Home Depot Mobile App”) to a first application program type and a second, distinct, application (an application executing on hdPhones) to a second application program type. EX1015, 6-10. In other words, the mere existence of an application means there is an application program type associated therewith. Under this interpretation, Elliott’s application programs *are each associated with at least one application program type* for the reasons described above. EX1002, ¶112.

3. [1.b] establishing a plurality of perimeters defining a plurality of geographic areas;

Elliott-Jacob combination discloses *establishing a plurality of perimeters defining a plurality of geographic areas*. EX1004, ¶¶15-17. EX1005, Abstract, ¶22, ¶¶27-28. EX1002, ¶113.

Elliott’s content delivery platform receives advertisements from advertisers 106 along with targeting information that specifies advertisers’ 106 “preference[s] for which demographic should receive each advertisement.” EX1004, ¶15.

Advertising intermediary 104 stores the advertisements in advertisement database

206 along with the targeting information. EX1004, ¶15. Advertising intermediary 104 also includes a subscriber database 208 that stores account information for each mobile phone service subscriber 110. EX1004, ¶16 (“Account information...includes an e-mail address, physical address or telephone number..., the user’s name, and other contact information” as well as “demographic information about the subscriber” and “preferences about the kinds of advertisements the subscriber wishes to receive”). Advertising intermediary includes an advertisement selection engine 202 which “matches advertisements in advertisement database 206 with subscriber information in subscriber database 208, choosing the most desirable advertisements to show to each subscriber based both on the advertiser’s specified target demographic for the advertisement and on the subscriber’s indicated preferences for advertisements.” EX1004, ¶17. EX1002, ¶114.

Though Elliott does not explicitly describe establishing a plurality of perimeters defining a plurality of geographic areas, Jacob discloses this functionality. Jacob discloses a system in which a service provider delivers content and advertisements to a user’s communication unit or mobile device. EX1005, Abstract. The service provider stores advertisements and advertisement attributes corresponding to the advertisements. EX1005, ¶22. One of the advertisement attributes includes geographic location specified as a zip code. EX1005, ¶27 (“The

significance of the geographic location can be the physical presence of an advertiser's place of business or a general geographic area in which the advertiser believes the target advertisement recipient should be located for optimum value of the advertisement"), ¶28 ("Jane's identifies the following attributes for her pancake house: 1) restaurant and 2) local address and ZIP code(s) (i.e., local market)").

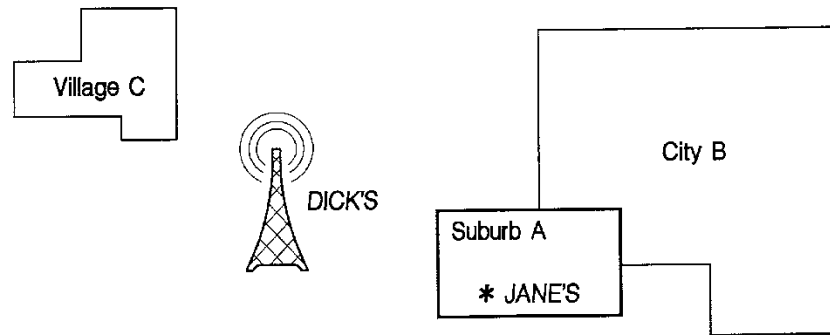


Fig. 3

EX1005, FIG. 3 (outline of City B is a perimeter that defines the geographic area of City B; similar reasoning applies for Suburb A and Village C). A ZIP code is well-known to be a pre-established perimeter that defines a geographic area.

Therefore, Jacob's ZIP codes constitute a plurality of perimeters that define a plurality of geographic areas. *See, e.g.*, EX1016, 4 ("The first three digits of the ZIP code were invented by Robert A. Moon, who came up with a system for dividing the country into approximately 900 geographical areas"). A POSITA would have understood that Jacob's service provider 123 must be pre-programmed to accept ZIP codes and associate those ZIP codes with their corresponding perimeters that define geographic areas in which an advertiser desires to advertise.

This pre-programming constitutes establishing a plurality of perimeters. Moreover, a POSITA would have understood and found obvious to implement the targeting information provided by advertisers 106 to advertising intermediary 104 in Elliott to include Jacob's location attributes (*e.g., perimeters defining a geographic area*) provided by the advertisers 119, 121 to the service provider 123. §IV(C) (motivation to combine). EX1002, ¶115.

4. [1.c] reserving delivery of content from a plurality of sponsors to the plurality of registered application programs on the basis of both a geographic area and an application program type associated with each of the plurality of registered application programs;

Elliott-Jacob combination discloses this limitation. EX1004, ¶¶14-15, ¶18; EX1005, ¶22, ¶¶27-28. EX1002, ¶116.

Elliott discloses *reserving delivery of content* (advertisements) *from a plurality of sponsors* (advertisers) *to the plurality of registered application programs* (application programs provided by application distributor 102). EX1004, ¶¶14-15, ¶18; §III(D)(1) (“reserving” construction). In operation, Elliott's advertising intermediary 104 receives advertisements from multiple advertisers 106 (i.e., Sponsor #1 (red) and Sponsor #2 (blue)) along with targeting information that specifies advertisers' 106 “preference[s] for which demographic should receive each advertisement.” EX1004, ¶15, FIG. 1 (annotated below):

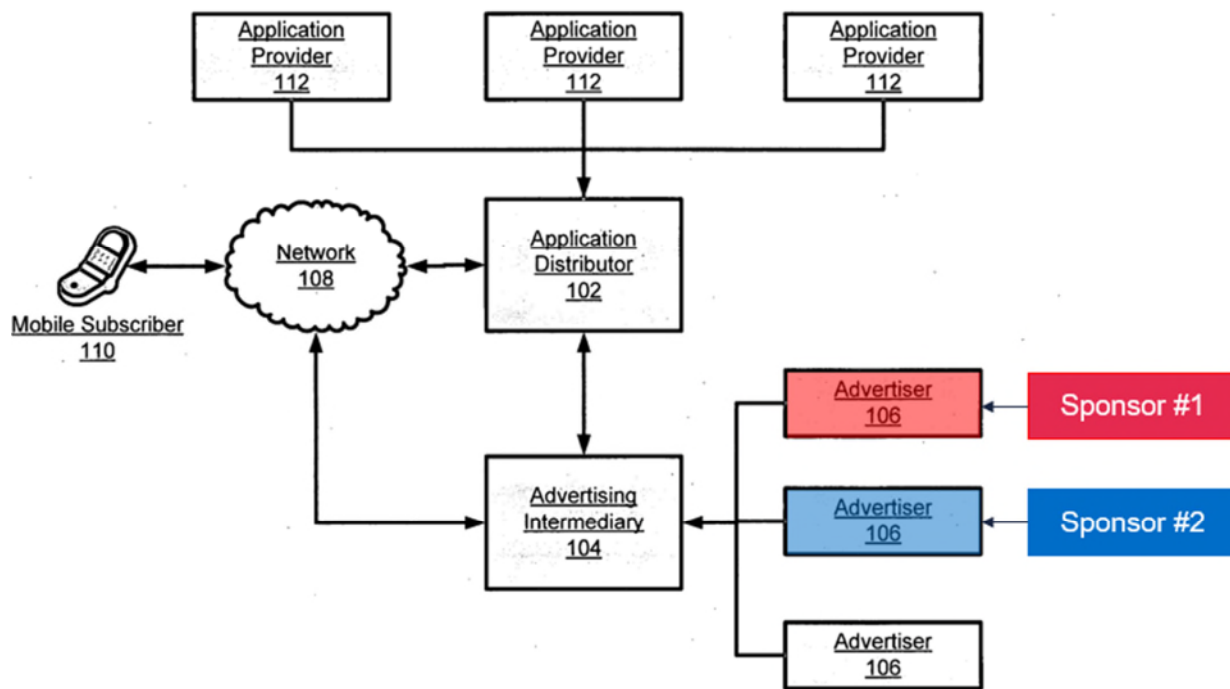


Fig. 1

EX1002, ¶117.

Elliott’s advertisement intermediary 104 then stores the advertisements “in advertisement database 206, along with an indication of the type of advertisement...[and the] targeting information...supplied by the advertiser 106.” EX1004, ¶15. The act of advertisement intermediary 104 interfacing with advertisers 106 to receive and store the advertisements, along with the targeting information, for subsequent delivery of the advertisements in accordance with the targeting information in an exclusive or non-exclusive manner is an act of making a reservation. EX1004, ¶¶14-15, ¶17 (“choosing the most desirable advertisement to show each subscriber based...on the advertiser’s specified target demographic

for the advertisement”), ¶18 (“Application distributor 102 distributes mobile applications provided by application providers 112 to mobile subscribers” and “Advertising content is typically provided over network 108 after the application is installed on the mobile device”); §III(D)(1) (“reserving” construction). EX1002, ¶118.

Elliott’s application distributor 102 delivers the content to the plurality of registered application programs *on the basis of...an application program type associated with each of the plurality of registered application programs*. As explained above, Elliot discloses that there is an *application program type associated with each of the plurality of registered application programs*. §IV(D)(2) (limitation 1.a). Further, Elliott’s sponsors can specify the type of applications they desire to sponsor. EX1004, ¶14 (“an advertiser may be interested in sponsoring a video game played using the mobile device”). When Elliott’s application distributor 102 requests an advertisement from advertisement intermediary 104, application distributor 102 specifies the type of application requesting the content so that the advertisement intermediary 104 can select an appropriate advertisement for the application. EX1004, ¶18 (“application distributor 102 requests an advertisement from the advertising intermediary 104...the application distributor 102 additionally specifies the application in which the advertisement is being inserted as well as the subscriber who will receive the advertisement,” which

“allows advertisement selection engine 202 to select an advertisement appropriate for the...subscriber and application”). Accordingly, Elliott’s advertisement intermediary 104 delivers an advertisement to the plurality of registered application programs on the basis of their respective application program types. EX1004, ¶14, ¶18. EX1002, ¶119.

Further, a POSITA would have understood that an application type is a well-known attribute or parameter for determining and selecting which advertisements to send to end users. *See, e.g.*, EX1011, ¶95 (“The content request may include...data indicating the type of application associated with application 176, data identifying application 176, or the like”), ¶99 (“a first ad server 150 may serve content items directed for presentation using a first type of applications 176 (e.g., games), whereas a second ad server 150 may serve content items directed for presentation using a second type of applications 176 (e.g., utility applications)”). §IV(D)(2) (limitation 1.a). EX1002, ¶120.

Though Elliott does not explicitly describe how the geographic location information is used in combination with Elliot’s subscriber’s preferences, Jacob discloses this functionality. Jacob discloses reserving delivery of advertisements to mobile devices on the basis of a geographic area. §IV(D)(3) (limitation 1.b). Specifically, advertisers provide advertisements and advertisement attributes to service provider 123 for delivery to mobile devices. EX1005, ¶22. One of the

advertisement attributes is a geographic location attribute. EX1005, ¶27 (“The significance of the geographic location can be the physical presence of an advertiser’s place of business or a general geographic area in which the advertiser believes the target advertisement recipient should be located for optimum value of the advertisement”), ¶28 (“Jane’s identifies the following attributes for her pancake house: 1) restaurant and 2) local address and ZIP code(s) (i.e., local market)”).

§IV(D)(3) (limitation 1.b.). Jacob’s request to deliver advertisements to a particular geographic area using the geographic location attribute constitutes a reservation for a non-exclusive interest in that geographic location. EX1005, ¶27, ¶28 (“let us consider one advertiser, 119, to be Jane’s Pancake House and another advertiser, 121, to be Dick’s Television Broadcasting Company...Jane’s identifies the following attributes for her pancake house: 1) restaurant and 2) local address and ZIP code(s) (i.e., local market)...Dick’s identifies the attributes: 1) entertainment, 2) television, and 3) regional market. As depicted in the map representation of FIG. 3, Jane’s Pancake House is located in suburb A while Dick’s Television Broadcasting Company provides a television signal that covers suburb A, city B, and village C”), ¶36 (“a subscriber having a current location code matching the advertisement location attribute location code and advertising preferences of ‘restaurant’ and ‘television’ will get matches for Jane’s Pancake House and Dick’s

Television Broadcasting Company”), FIG. 3; §III(D)(1) (“reserving” construction). EX1002, ¶121.

A POSITA would have understood and found obvious to implement the targeting information provided by advertisers 106 to advertising intermediary 104 in Elliott to include the geographic location attributes provided by the advertisers 119, 121 to the service provider 123 in Jacob such that the delivery of content is performed on the basis of both *a geographic area* (Jacob’s geographic location attribute) *and an application program type* (Elliott’s application type) *associated with each of the plurality of registered application programs* (applications provided by application distributor 102). §IV(C) (motivation to combine). EX1002, ¶122.

5. [1.d] receiving, from a sponsor, a request to obtain an interest in a selected one of the plurality of geographic areas;

The Elliott-Jacob combination discloses this limitation. A *request to obtain an interest* includes a request for a reservation. §III(D)(3) (“request to obtain an interest” construction). As discussed in limitation 1.c, the Elliott-Jacob combination discloses *reserving delivery of content from a plurality of sponsors to the plurality of registered application programs on the basis of...a geographic area*. When a new sponsor (Sponsor #3, green) in the Elliott-Jacob combination interfaces with advertising intermediary 104 for the delivery of advertisements to

mobile subscriber 110 after the step of reserving delivery of content from a plurality of previous sponsors (*e.g.*, Sponsor #1, red and Sponsor #2, blue) has been performed, the advertising intermediary 104 receives a new request for a reservation from the new sponsor, Sponsor #3:

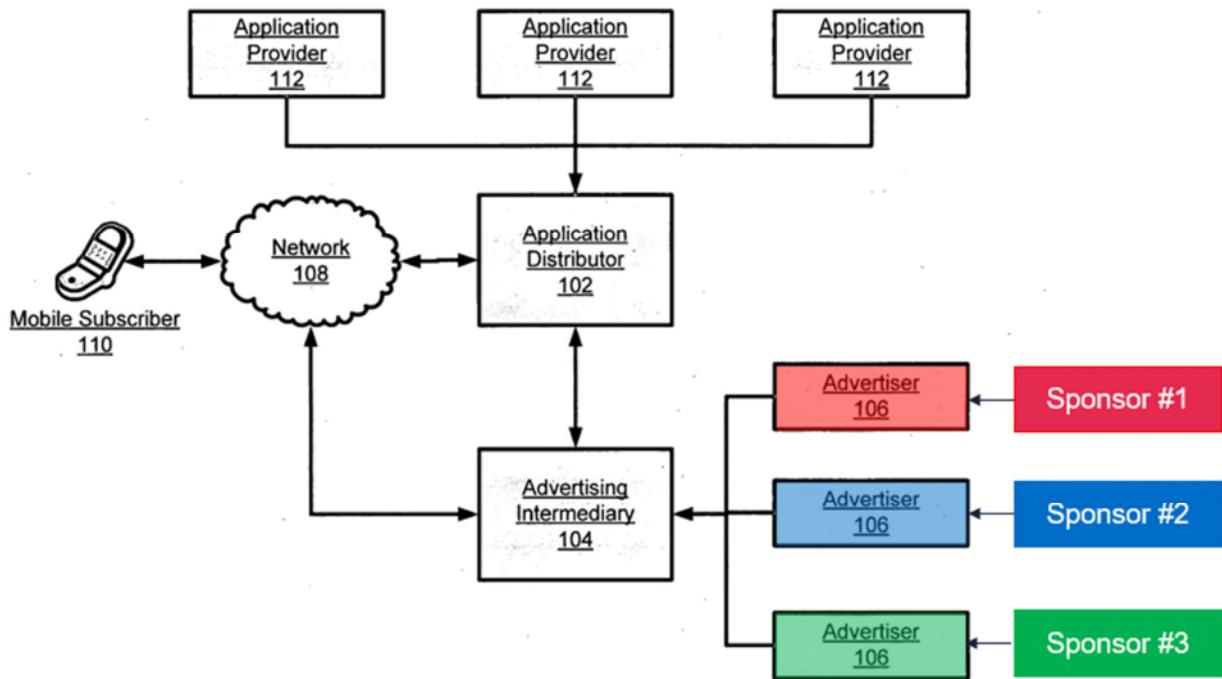


Fig. 1

EX1004, FIG. 1 (annotated). Thus, the Elliott-Jacob combination discloses this limitation. EX1002, ¶123.

6. [1.e] providing the sponsor a response to the request;

Elliott discloses this limitation. Elliott discloses advertiser 106 (a *sponsor*, such as Sponsor #3 discussed above) receiving a response from advertising intermediary 104 after the reservation request from the sponsor, such as when the

advertising intermediary 104 communicates the response rate to a particular advertiser 106 for the purpose of charging the advertiser 106 based on the response rate. EX1004, ¶24 (“This allows advertising intermediary 104 to track the response rate based on e-mails sent to mobile subscribers, which can be used, for example, to adjust the amount charged to a particular advertiser 106”). The message communicating the response rate must come after the reservation request because without the reservation request, there would be no advertisement for tracking the response rate. EX1004, ¶24. Therefore, the message including the response rate is *a response to the request*. §III(D)(6) (construction of limitation 1.e). EX1002, ¶124.

The Elliott-Jacob combination also renders obvious this limitation. Jacob discloses the advertiser receiving a response to the request. EX1005, ¶26 (“In an embodiment in which the service provider offers a subscription service...the service provider can provide some assurance to prospective advertisers that their advertisements will be delivered to preferred recipients by matching certain of an advertiser’s advertisement attributes, stored by the service provider, to particular subscribers’ stored preferences or by using subscriber demographic data, which can also be provided to the prospective advertisers by the publisher”). Thus, a POSITA would have found it to be an obvious design choice to modify Elliott in light of Jacob to notify Elliot’s advertiser that the request to run advertisements

was received. For example, when Jane's Pancake House adds an advertisement for City B for holiday-only advertisements, it would have been obvious to inform or confirm to Jane's that the advertisement will run. EX1002, ¶125.

7. [1.f] storing a record of the interest in the selected one of the plurality of geographic areas;

Elliott-Jacob combination discloses *storing a record of the interest in the selected one of the plurality of geographic areas*. EX1004, ¶15. Elliott's advertising intermediary 104 stores advertisements in advertisement database 206 along with the targeting information. EX1004, ¶15. As indicated above, the combination of Elliott and Jacob discloses that the targeting information includes an interest in a selected one of the plurality of geographic areas. §IV(D)(6) (limitation 1.e). Therefore, a POSITA would have understood and found obvious to modify Elliott's targeting information stored in advertisement database 206 to include a record of the interest in the selected one of the plurality of geographic areas, *i.e.*, Jacob's geographic location advertisement attribute. §IV(C) (motivation to combine). EX1002, ¶126.

8. [1.g] receiving, from the sponsor, content to be delivered to registered application programs having target locations contained within the selected one of the plurality of geographic areas;

Elliott-Jacob combination discloses this limitation. EX1004, ¶¶14-15, ¶¶17-18; EX1005, ¶29, ¶37. EX1002, ¶127.

Elliott's advertising intermediary 104 receives advertisements (*content*) from the advertisers 106 (*sponsors, e.g.,* Sponsor 3) that the application distributor 102 delivers to the *registered application programs* when appropriate. EX1004, ¶¶14-15, ¶18 ("Advertising content is typically provided over the network 108 after the application is installed on the mobile device"), ¶18 ("Application distributor 102 may send advertisements piggybacked on application content it provides as part of its runtime services"), ¶18 ("application distributor 102 additionally specifies the application in which the advertisement is being inserted as well as the subscriber who will receive the advertisement"). Advertising intermediary 104 includes a selection engine 202 for selecting one of the plurality of stored advertisements to deliver to the registered application. EX1004, ¶15 ("Advertising intermediary 104...includes an advertisement selection engine 202"), ¶17 ("Advertisement selection engine 202...matches advertisements in advertisement database 206 with subscriber information in subscriber database 208, choosing the most desirable advertisement to show to each subscriber based both on the advertiser's specified target demographic for the advertisement and on the subscriber's indicated preferences for advertisements"), ¶18 ("application distributor 102 additionally specifies the application in which the advertisement is being inserted," which "allows advertisement selection engine 202 to select an advertisement appropriate for the...subscriber and application"). EX1002, ¶128.

Jacob discloses that the content is delivered to registered application programs *having target locations contained within the selected one of the plurality of geographic areas*. Jacob discloses delivering an advertisement from a particular advertiser to mobile devices when the mobile devices are determined to be within a geographic region defined by the geographic location advertisement attribute. EX1005, ¶29 (“It is a feature of the present invention that the advertising added to the delivered publication be selected for, inter alia, a location attribute of the advertising”), ¶37 (“When the user requests content, at 904, or when the communications unit in accordance with its programmed instructions requests content, the communications unit conveys the content request and the geographic coordinates to the service provider” and the “service provider obtains the content, sorts one or more subsidizing advertisements by location attribute, populates a publication , and transmits (publishes) the publication to the communications unit”). EX1002, ¶129.

A POSITA would have understood and found obvious to implement Elliott’s system to deliver advertisements on the basis of Jacob’s geographic location attributes. §IV(C) (motivation to combine). EX1002, ¶130.

9. [1.h] receiving, from a registered application program, a request for content to be used within the registered application program;

Elliott discloses *receiving, from a registered application program* (distributed application), *a request for content* (advertisements) *to be used within the registered application program* (distributed application). EX1004, ¶18, ¶27, FIG. 3. Elliott's application distributor 102 receives a request for an advertisement from an application executing on the mobile subscriber 110. EX1004, ¶27, FIG. 3. The content is to be used within the registered application program. EX1004, ¶18 (describing types of advertisements displayed within the application, *e.g.*, "a sponsorship splash screen shown when starting the application, application sponsorship logos embedded within other application screens, non-interactive advertising messages (commonly called 'Impressions'), advertising messages or surveys requiring interaction from the user"), ¶18 ("the application distributor 102 additionally specifies the application in which the advertisement is being inserted"). EX1002, ¶131.

10. [1.i] in response to receiving the request: selecting content from at least one sponsor to be delivered to the registered application program, subject to the reserving; and

Elliott-Jacob combination discloses this limitation. EX1004, ¶15, ¶¶17-18. EX1005, ¶29, ¶37. EX1002, ¶132.

Elliott discloses, in response to receiving a request (§IV(D)(8) limitation 1.g), *selecting content* (advertisements) *from at least one sponsor* (advertiser, *e.g.*, Sponsor #3) *to be delivered to the registered application program* (application), *subject to the reserving* on the basis of an application type associated with the registered application program. §III(D)(2) (“subject to the reserving” construction). Specifically, Elliott’s advertising intermediary 104 includes a selection engine 202 for selecting, which of the plurality of stored advertisements, should be delivered to the registered application. EX1004, ¶15 (“Advertising intermediary 104...includes an advertisement selection engine 202”), ¶17 (“Advertisement selection engine 202...matches advertisements in advertisement database 206 with subscriber information in subscriber database 208, choosing the most desirable advertisement to show to each subscriber based both on the advertiser’s specified target demographic for the advertisement and on the subscriber’s indicated preferences for advertisements”). Elliott further discloses that this selection is based on the type of application requesting the advertisement. EX1004, ¶14 (“an advertiser may be interested in sponsoring a video game played using the mobile device”), ¶18 (“application distributor 102 additionally specifies the application in which the advertisement is being inserted,” which “allows advertisement selection engine 202 to select an advertisement appropriate for the...subscriber and application”). EX1002, ¶133.

Jacob discloses delivering an advertisement from a particular advertiser to a mobile device *subject to the reserving* when the mobile device is determined to be within a geographic region defined by the geographic location advertisement attribute. §III(D)(2) (“subject to the reserving” construction); EX1005, ¶29 (“It is a feature of the present invention that the advertising added to the delivered publication be selected for, inter alia, a location attribute of the advertising”), ¶37 (“When the user requests content, at 904, or when the communications unit in accordance with its programmed instructions requests content, the communications unit conveys the content request and the geographic coordinates to the service provider” and the “service provider obtains the content, sorts one or more subsidizing advertisements by location attribute, populates a publication , and transmits (publishes) the publication to the communications unit”). Accordingly, Jacob discloses that its service provider 123 selects advertisements on the basis of the geographic location of the mobile device. EX1002, ¶134.

A POSITA would have understood and found obvious to implement the targeting information provided by advertisers 106 to advertising intermediary 104 in Elliott to include the geographic location attributes provided by the advertisers 119, 121 to the service provider 123 in Jacob such that selection of content to be delivered to the application is performed *subject to the reserving* on the basis of both a geographic area (Jacob’s geographic location attribute) and an application

program type (Elliott's application type) associated with each of the plurality of registered application programs (applications provided by application distributor 102). §IV(C) (motivation to combine). EX1002, ¶135.

11. [1.j] [in response to receiving the request:...] providing the content from the at least one sponsor to the registered application program.

Elliott discloses *providing the content* (the selected advertisement) *from the at least one sponsor* (advertiser) *to the registered application program* (application). EX1004, ¶18, ¶27. Elliott discloses that once the advertisement is selected responsive to the request, the application distributor 102 provides the advertisement to the application executing on the mobile device. EX1004, ¶18 (“Advertising content is typically provided over the network 108 after the application is installed on the mobile device”), ¶18 (“Application distributor 102 may send advertisements piggybacked on application content it provides as part of its runtime services”), ¶18 (“application distributor 102 additionally specifies the application in which the advertisement is being inserted,” which “allows advertisement selection engine 202 to select an advertisement appropriate for the...subscriber and application”), ¶27 (“[A]n application requests an advertisement from application distributor 102” and “Application distributor 102 then forwards 308 the advertisement to the mobile subscriber 110”), FIG. 3. EX1002, ¶136.

E. Claim 2

Elliott renders this combination obvious, alone or in combination with Jacob. EX1002, ¶137.

1. [2.pre] The method of claim 1, further comprising:

§IV(D) (claim 1). EX1002, ¶138.

2. [2.a] recording a request identifier associated with the request; and

To the extent this limitation is not indefinite, regardless of which request provides the antecedent basis for this limitation (the request for an interest or the request for content), Elliott discloses this limitation. EX1004, ¶17, ¶21, ¶24, ¶32; §III(D)(7) (construction of this limitation). EX1002, ¶139.

Elliott discloses *recording a request identifier* (identifier in a link or URL) *associated with the request*. As discussed above, Elliott discloses providing content (*i.e.*, advertisements) from application distributor 102 to the registered application program in response to a request for content by the registered application program. §§IV(D)(9)-(11) (limitations 1.h-1.j); EX1004, ¶27, FIG. 3. Elliott's advertisements include "a response mechanism by which the mobile subscriber 110 can indicate his interest in obtaining further information anonymously from the advertiser." EX1004, ¶21, ¶17 ("Each advertisement preferably includes a response option by which the mobile phone service subscriber can reply to an advertisement that piques his interest"). The response mechanism, also referred to

as a response option in Elliott, can take the form of a link or URL included in the advertisements delivered to the mobile subscriber. EX1004, ¶17 (“In one embodiment, the response option is a link...displayed as part of the advertisement”). When the response mechanism is interacted with (*i.e.*, when the URL is clicked), “a message is sent from the mobile subscriber’s device over the network 108 to the response engine 204 of advertising intermediary 104.” EX1004, ¶21. The message “includes information to identify...the advertisement being responded to.” EX1004, ¶21. Because the message that is sent when the URL is clicked includes information that identifies the advertisement, a POSITA would have understood and found obvious that the response mechanism (URL/link) would include the same information that identifies the advertisement (*i.e.*, the advertisement that was selected by the application distributor 102 and delivered to the mobile subscriber responsive to the request for content, and which is therefore associated with the request for content) because including parameters such as identifiers in URLs was a well-known mechanism for passing information via URLs. EX1028 (showing exemplary parameters that are included in URLs); EX1009 (showing exemplary parameters that are included in URLs). Thus, Elliott discloses and renders obvious that the advertisement delivered to the mobile subscriber includes the response mechanism, which includes the indication of the

advertisement. EX1004, ¶17, ¶21; §IV(D)(9)-(11) (limitations 1.h-1.j). EX1002, ¶140.

a. When “the request” in this limitation is construed to refer to “a request for content” in limitation 1.h

As discussed above, Elliott application distributor 102 responds to a request for content by (i) selecting an advertisement (limitation 1.i), (ii) generating a response mechanism (URL), and (iii) delivering the advertisement with the response mechanism/URL to the mobile subscriber. EX1004, ¶17, ¶21; §III(D)(9)-(11) (limitations 1.h-1.j). As further discussed above, Elliott renders obvious that the response mechanism includes a *request identifier associated with the request [for content]*, namely the indication of the advertisement that was selected in response to the request for content (and is therefore associated with the request for content). Thus, a POSITA would have understood and found obvious that the response mechanism is associated with the request for content because it is generated and sent to the mobile subscriber when the registered application program requests content. EX1002, ¶141.

b. When “the request” is “a request to obtain an interest” in limitation 1.d

As previously discussed in §IV(E)(2), a POSITA would have found obvious that Elliott’s response mechanism (URL) includes an indication of “the advertisement being responded to.” EX1004, ¶21. Further, as previously discussed,

each advertisement delivered to a mobile subscriber is the result of a request from an advertiser to obtain an interest in advertising in a geographic area. §IV(D)(5) (limitation 1.d). Therefore, because the information that identifies the advertisement included in Elliott’s URL (*i.e.*, request identifier) identifies the advertisement that was delivered to the mobile subscriber, and the URL was created in response to the combination of the request to obtain an interest and the request for content (*i.e.*, the advertisement identified in the URL is selected in accordance with the request to obtain an interest), a POSITA would have understood and found obvious that the request identifier is associated with the request to obtain an interest. EX1002, ¶142.

Further, a POSITA would have understood that the link or URL (*i.e.*, the response mechanism) is a string of characters used to identify an element of a computer program, such as an element of the program executing on the advertising intermediary 104, *i.e.*, the response engine 204. *See, e.g.*, EX1004, ¶15 (“Advertising intermediary 104 is illustrated in greater detail in FIG. 2, and includes an advertisement selection engine 202, a response engine 204, an advertisement database 206, and a subscriber database 208”), ¶21 (“By triggering the response mechanism, a message is sent from the mobile subscriber’s device over the network 108 to the response engine 204 of advertising intermediary 104”), ¶32 (“process steps and instructions of the present invention could be embodied in

software, firmware or hardware, and when embodied in software, could be downloaded to reside on and be operated from different platforms used by real time network operating systems”), FIG 2 (“response engine 204”). EX1002, ¶143.

A POSITA would have understood that the creation of a URL and sending the URL to the mobile subscriber would constitute a *recording*. EX1002, ¶144.

3. [2.b] providing the request identifier to the registered application program.

Elliot discloses *providing the request identifier* (tracking identifier or URL) *to the registered application program* (application). EX1002, ¶145.

As previously indicated, Elliott discloses delivering advertisements to mobile subscribers 110. §IV(D)(11) (limitation 1.j). Elliott also discloses including an identifier, such as a link or URL, with the advertisement delivered to an application program executing on device of the mobile subscriber. §IV(E)(2) (limitation 2.a). EX1002, ¶146.

F. Claim 3

Elliott renders this combination obvious, alone or in combination with Jacob. EX1002, ¶147.

1. [3.pre] The method of claim 2, further comprising:

See §IV(E) (claim 2). EX1002, ¶148.

2. [3.a] receiving information related to user interaction with the provided content, the information including the request identifier; and

Elliot-Jacob combination discloses *receiving information* (message) *related to user interaction* (activation of link in the advertisement), *the information including the request identifier* (indication of the advertisement in the URL).

EX1004, ¶17, ¶21. EX1002, ¶149.

Elliott's content delivery platform receives "a message...sent from the mobile subscriber's device over the network 108 to the response engine 204 of advertising intermediary." EX1004, ¶21. The message is sent responsive to the user interacting with the advertisement by selecting the response mechanism or response option included in the advertisement. EX1004, ¶17 ("Each advertisement preferably includes a response option by which the mobile phone subscriber can reply to an advertisement that piques his interest...the response option is a link or a form field displayed as part of the advertisement in a mobile web...browser"), ¶17 ("there is a user interface provided in a binary application allowing user interaction, and the application provides that response to the advertising intermediary 106 over the mobile network 108 using an appropriate encoding and communication protocol"), ¶21 ("By triggering the response mechanism, a message is sent from the mobile subscriber's device over the network 108 to the response engine 204 of advertising intermediary 104"). A POSITA would have

understood that the message sent from the mobile subscriber to the response engine 204 of advertising intermediary 104 must necessarily include the identifier, because the identifier is used to track each request's response rate, or in the context of the identifier being the response mechanism, activating the link or URL response mechanism provides the advertising intermediary with information corresponding to the link or URL. *See, e.g.*, EX1004, ¶21 (“the message includes information to identify the subscriber, such as the subscriber's telephone number or subscriber ID; the advertisement being responded to; the application associated with the advertisement; and the time at which the response was made”). EX1002, ¶150.

3. [3.b] providing additional content to the registered application in response to the received information.

Elliott discloses *providing additional content* (additional advertisements) *to the registered application in response to the received information*. EX1004, ¶17, ¶23. Elliott discloses that “[u]pon receiving the message back from the mobile subscriber 110, response engine 204 determines based on information provided by the advertiser what additional information should be sent to the mobile subscriber 110.” EX1004, ¶23. Elliott's advertisement selection engine 202 uses the response information to select subsequent advertisements to deliver to the application. EX1004, ¶17 (“advertisements are selected for a subscriber based in part on advertisements to which the subscriber has previously responded”). EX1002, ¶151.

- G. Claim 5 - The method of claim 1, further comprising: reserving a specific one of the plurality of geographic areas for exclusive delivery of content associated with a particular one of the plurality of sponsors to registered application programs and having a target location contained within the specific one of the plurality of geographic areas.**

Elliott renders this claim obvious, alone or in combination with Jacob.

§IV(D) (claim 1). Elliott-Jacob combination discloses *reserving delivery of content from a plurality of sponsors to the plurality of registered application programs on the basis of both a geographic area and an application program type associated with each of the plurality of registered application programs*. §IV(D)(4) (limitation 1.c). A POSITA would have understood and found obvious that the combination of Elliott and Jacob could be further modified such that an advertiser can request that only their advertisements be delivered to applications when mobile devices executing those applications have a location within a geographic area. *See, e.g.*, EX1012, ¶89 (“The alert system operator can sell exclusive advertisement rights for a particular advertisement category to vendors for defined regions or specified periods of time. For example, a restaurant owner can purchase the exclusive rights for food advertisements within two blocks of the restaurant during the lunch hours. Alternatively, the owner of a first restaurant can purchase the exclusive advertisement alert rights for a region proximate to a competing restaurant”). EX1002, ¶¶152-154.

H. Claim 6

Elliott renders this claim obvious, alone or in combination with Jacob.

EX1002, ¶155.

1. [6.pre] A system comprising:

Elliott-Jacob combination discloses *a system* (collectively, application distributor 102 and advertising intermediary 104). EX1004, ¶18 (“Application distributor 102 distributes mobile applications provided by application providers 112 to mobile subscribers 110”), ¶13 (“Application distributor 102...distributes both applications and advertisements over a network 108 to a mobile device 110”), ¶27 (“When an application requests an advertisement from application distributor 102, application distributor 102 transmits 304 data to advertising intermediary 104 about which subscriber is using which application...advertisement selection engine 202 of advertisement intermediary 104 selects an appropriate advertisement and transmits 306 the selected advertisement back to application distributor 102” which “then forwards 308 the advertisement to mobile subscriber 110”). Elliott’s application distributor 102 and advertisement intermediary 104 operate under the control of the same entity. EX1004, ¶19 (“Alternatively, application distributor 102 may be the same business entity as advertising intermediary 104”). EX1002, ¶156.

2. [6.a] memory

Elliott-Jacob combination discloses *a memory* (memory of one of application distributor 102 or advertisement intermediary 104). EX1004, ¶33 (“The

present invention also relates to an apparatus for performing the operations herein” which “may be specifically constructed for the required purposes, or it may comprise a general-purpose computer” which includes “a computer readable storage medium, such as...any type of disk including floppy disks, optical disks, CD-ROMs, magnetic-optical disks, read-only memories (ROMs), random access memories (RAMs), EPROMs, EEPROMs, magnetic or optical cards, application specific integrated circuits (ASICs), or any type of media suitable for storing electronic instructions”). EX1002, ¶157.

3. [6.b] a communications interface operably coupled to the memory; and

Elliott-Jacob discloses *a communications interface* (communications interface of one of application distributor 102 or advertisement intermediary 104) *operably coupled to the memory*. EX1004, ¶33 (“The present invention also relates to an apparatus for performing the operations herein” which “may be specifically constructed for the required purposes, or it may comprise a general-purpose computer”). A POSITA would have understood and found obvious that general purpose computers, such as those disclosed in Elliott, would include a communications interface (blue) operably coupled to its memory (red):

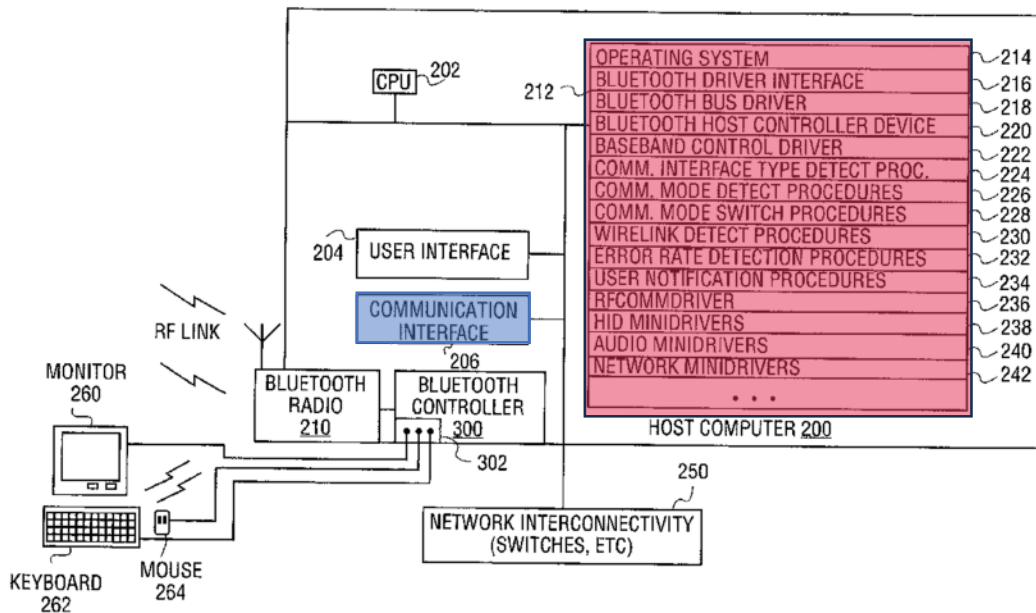


FIG. 2

EX1010, FIG. 2 (communication interface 206 coupled with memory 212), ¶134 (“host computer 200 includes...memory 212”), ¶137 (“memory 212 of the host computer 200 may be implemented as RAM (random access memory), SRAM (synchronous random access memory), SDRAM (synchronous data random access memory) or a combination of RAM and non-volatile memory”). EX1002, ¶158.

4. **[6.c] at least one processor operably coupled to the memory and the communications interface, the processor configured to execute a program of instructions, the program of instructions comprising:**

Elliott-Jacob combination discloses *at least one processor* (processor of one of application distributor 102 or advertisement intermediary 104) *operably coupled to the memory and the communications interface, the processor configured to*

execute a program of instructions (computer program). EX1004, ¶33 (“The present invention also relates to an apparatus for performing the operations herein” which “may be specifically constructed for the required purposes, or it may comprise a general-purpose computer” which includes “a computer program stored in the computer[T]he computers referred to in the specification may include a single processor or may be architectures employing multiple processor designs”), ¶32 (“Certain aspects of the present invention include process steps and instructions described herein in the form of an algorithm”), ¶32 (“process steps and instructions of the present invention could be embodied in software”). A POSITA would have understood and found obvious that general purpose computers, such as those disclosed in Elliott, would include a processor (green) operably coupled to its memory (red) and communications interface (blue):

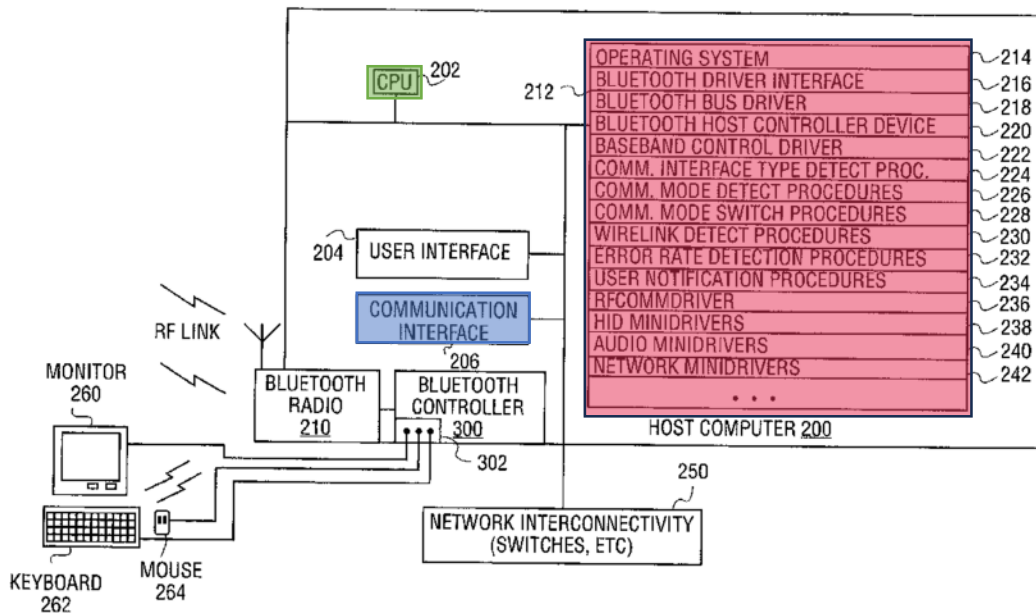


FIG. 2

EX1010, FIG. 2 (CPU 202 coupled with communication interface 206 and memory 212). EX1002, ¶159.

5. **[6.d] at least one instruction to register a plurality of application programs for use with a content delivery platform, wherein the plurality of registered application programs are each associated with at least one application program type;**

[6e] at least one instruction to establish a plurality of perimeters defining a plurality of geographic areas

Elliott-Jacob combination discloses these limitations. §IV(D)(2)-(3)

(limitation 1.a-1.b). These limitations are substantially similar to limitations 1.a-1.b, however, limitations 6.d-6.e recast each of the limitations as “at least one instruction.” Elliott discloses and renders obvious implementing its system using

instructions—“process steps and instructions of the present invention could be embodied in software” and “[c]ertain aspects of the present invention include process steps and instructions described herein in the form of an algorithm.”

EX1004, ¶32. EX1002, ¶¶160-161.

6. **[6.f] at least one instruction to maintain at least one record indicating content delivery reservations associating each of a plurality of sponsors with specific registered application program types and at least one of the plurality of geographic areas;**

Elliott-Jacob combination discloses this limitation. EX1004, ¶¶13-15, ¶18. EX1005, ¶22, ¶¶27-28. Elliott discloses and renders obvious implementing its system using instructions. §IV(H)(5) (limitations 6.d-6.e). EX1002, ¶162.

Elliott discloses *maintain[ing] at least one record* (line item in advertisement database 206) *indicating content delivery reservations* (targeting information) *associating each of a plurality of sponsors* (advertisers) *with specific registered application program types* (application types associated with applications provided by application distributor 102). EX1004, ¶¶14-15, ¶18. Elliott’s advertising intermediary 104 receives requests from advertiser 106 for “advertisements that it would like [the advertising intermediary 104 or application distributor 102] to deliver to users of mobile device 110.” EX1004, ¶13, ¶15. Advertising intermediary 104 also receives, from each advertiser, targeting information that specifies the advertiser’s “preference[s] for which demographic

should receive each advertisement.” EX1004, ¶15. These preferences include the type of applications the advertiser 106 is interested in sponsoring. EX1004, ¶14 (“an advertiser may be interesting in sponsoring a video game played using the mobile device”), ¶14 (“Sponsorship messages typically involve providing an advertisement on the mobile applications splash screen, and may also include having the advertiser’s logo or slogan on some or all of the pages of the mobile application”). Further, application distributor 102 can distribute many types of mobile applications, such as “games, shopping applications, social networking applications, mapping applications, etc.” EX1004, ¶18. The advertisements, along with their targeting information, are stored or *maintained* in advertisement database 206. EX1004, ¶15 (“Advertisements received from advertisers are stored in advertisement database 206” and “targeting information is also supplied with the advertisements and stored in advertisement database 206”). Advertisements and targeting information associated with the advertisements for a given advertiser 106 constitute the claimed *content delivery reservations*. Further, because the targeting information includes an indication of the type of application the advertiser 106 would like to sponsor, a POSITA would have understood and found obvious that the targeting information *associates* a given advertiser with a specific registered application program type (*e.g.*, video game application). EX1002, ¶163.

Furthermore, Jacob discloses reserving delivery of advertisements to mobile devices on the basis of a geographic area. §IV(D)(3) (limitation 1.b). Specifically, advertisers provide advertisements and advertisement attributes to service provider 123 for delivery to mobile devices. EX1005, ¶22. One of the advertisement attributes is a geographic location attribute. EX1005, ¶27 (“The significance of the geographic location can be the physical presence of an advertiser’s place of business or a general geographic area in which the advertiser believes the target advertisement recipient should be located for optimum value of the advertisement”), ¶28 (“Jane’s identifies the following attributes for her pancake house: 1) restaurant and 2) local address and ZIP code(s) (i.e., local market)”). §IV(D)(3) (limitation 1.b.). Accordingly, Jacob discloses reserving delivery of advertisements from a plurality of advertisers to the mobile device on the basis of a geographic area. EX1002, ¶164.

A POSITA would have understood and found obvious to modify Elliott’s targeting information maintained in advertisement database 206 to include the Jacob’s geographic location attributes such that the *content delivery reservations* (i.e., advertisement with targeting information) associates an advertiser with a specific application program type and a geographic area. §IV(C) (motivation to combine). EX1002, ¶165.

7. **[6.g] at least one instruction to receive, from a sponsor, a request to obtain an interest in a selected one of the plurality of geographic areas;**

[6.h] at least one instruction to provide the sponsor a response to the request;

[6.i] at least one instruction to store a record of the interest in the selected one of the plurality of geographic areas;

[6.j] at least one instruction to receive, from the sponsor, content to be delivered to registered application programs having target locations contained within the selected one of the plurality of geographic areas;

[6.k] at least one instruction to receive a request from a registered application program for content to be used within the registered application program;

[6.l] at least one instruction to select content associated with at least one of the plurality of sponsors, to be delivered to the registered application program of a specific type, in accordance with a content delivery reservation associating the at least one sponsor with a geographic area and a registered application program type; and

[6.m] at least one instruction to provide the selected content to the registered application program.

Elliott-Jacob combination discloses these limitations. §IV(D)(5)-(12)

(limitation 1.d-1.j). These limitations are substantially similar to limitations 1.d-1.j,

however, limitations 6.g-6.m recast each limitation as “at least one instruction to.”

Elliott discloses and renders obvious implementing its system using instructions—

“process steps and instructions of the present invention could be embodied in

software” and “[c]ertain aspects of the present invention include process steps and

instructions described herein in the form of an algorithm.” EX1004, ¶32. EX1002, ¶¶166-172.

I. Claim 7

Elliott renders this combination obvious, alone or in combination with Jacob. EX1002, ¶173.

- 1. [7.pre] The system of claim 6, wherein the program of instructions further comprises**

See §IV(H) (claim 6). EX1002, ¶174.

- 2. [7.a] at least one instruction to record a request identifier associated with the request; and**

[7.b] at least one instruction to provide the request identifier to the registered application program.

Elliott-Jacob combination discloses these limitations. §§IV(E)(2)-(3) (limitations 2.a-2.b). These limitations are substantially similar to limitations 2.a-2.b; however, limitations 7.a-7.b recast the limitations as “at least one instruction.” Elliott discloses and renders obvious implementing its system using instructions—“process steps and instructions of the present invention could be embodied in software” and “[c]ertain aspects of the present invention include process steps and instructions described herein in the form of an algorithm.” EX1004, ¶32. EX1002, ¶¶175-176.

J. Claim 8

Elliott renders this combination obvious, alone or in combination with Jacob. EX1002, ¶177.

- 1. [8.pre] The system of claim 7, wherein the program of instructions further comprises:**

See §IV(I) (claim 7). EX1002, ¶178.

- 2. [8.a] at least one instruction to receive information related to user interaction with the provided content, the information including the request identifier; and**

[8.b] at least one instruction to provide additional content to the registered application in response to the received information.

Elliott-Jacob combination discloses these limitations. §IV(F)(2)-(3) (limitations 3.a-3.b). These limitations are substantially similar to limitations 3.a-3.b; however, limitations 8.a-8b recast the limitations as “at least one instruction.” Elliott discloses and renders obvious implementing its system using instructions—“process steps and instructions of the present invention could be embodied in software” and “[c]ertain aspects of the present invention include process steps and instructions described herein in the form of an algorithm.” EX1004, ¶32. EX1002, ¶¶179-180.

- K. Claim 10 - The system of claim 6, wherein the program of instructions further comprises: at least one instruction to reserve a specific one of the plurality of geographic areas for exclusive delivery of content associated with a particular one of the plurality of sponsors to registered application programs and**

having a target location contained within the specific one of the plurality of geographic areas.

Elliott renders this claim obvious, alone or in combination with Jacob.

§IV(G), (H) (claims 5-6). This limitation is substantially similar to limitation 5.a, however, limitation 10.a recasts the limitation as “at least one instruction to.”

Elliott discloses and renders obvious implementing its system using instructions—“process steps and instructions of the present invention could be embodied in software” and “[c]ertain aspects of the present invention include process steps and instructions described herein in the form of an algorithm.” EX1004, ¶32. EX1002, ¶¶181-183.

L. Claim 11

Elliott renders this claim obvious, alone or in combination with Jacob.

EX1002, ¶184.

1. [11.pre] A non-transitory computer readable medium tangibly embodying a program of computer executable instructions, the program of instructions comprising:

Elliot-Jacob combination discloses *a non-transitory computer readable medium* (collectively, application distributor 102 and advertising intermediary 104). EX1004, ¶18 (“Application distributor 102 distributes mobile applications provided by application providers 112 to mobile subscribers 110”), ¶13 (“Application distributor 102...distributes both applications and advertisements over a network 108 to a mobile device 110”), ¶27 (“When an application requests

an advertisement from application distributor 102, application distributor 102 transmits 304 data to advertising intermediary 104 about which subscriber is using which application...advertisement selection engine 202 of advertisement intermediary 104 selects an appropriate advertisement and transmits 306 the selected advertisement back to application distributor 102” which “then forwards 308 the advertisement to mobile subscriber 110”). Elliott’s application distributor 102 and advertisement intermediary 104 operate under the control of the same entity. EX1004, ¶19 (“Alternatively, application distributor 102 may be the same business entity as advertising intermediary 104”). EX1002, ¶185.

2. [11.a] at least one instruction to register a plurality of application programs for use with a content delivery platform, wherein the plurality of registered application programs are each associated with at least one application program type;
- [11.b] at least one instruction to establish a plurality of perimeters defining a plurality of geographic areas;
- [11.c] at least one instruction to maintain at least one record indicating content delivery reservations associating each of a plurality of sponsors with specific registered application program types and at least one of the plurality of geographic areas;
- [11.d] at least one instruction to receive, from a sponsor, a request to obtain an interest in a selected one of the plurality of geographic areas;
- [11.e] at least one instruction to provide the sponsor a response to the request;
- [11.f] at least one instruction to store a record of the interest in the selected one of the plurality of geographic areas;
- [11.g] at least one instruction to receive, from the sponsor, content to be delivered to registered application programs having target locations contained within the selected one of the plurality of geographic areas;
- [11.h] at least one instruction to receive a request from a registered application program for content to be used within the registered application program;
- [11.i] at least one instruction to select content associated with at least one of the plurality of sponsors, to be delivered to the registered application program of a specific type, in accordance with a content delivery reservation associating the at least one sponsor with a geographic area and a registered application program type; and

[11.j] at least one instruction to provide the selected content to the registered application program.

Elliott-Jacob combination discloses these limitations. §§IV(H)(5)-(7) (limitations 6.d-6.m). EX1002, ¶¶186-195.

M. Claim 12

Elliott renders this combination obvious, alone or in combination with Jacob. See §IV(L) (claim 11); §IV(I) (claim 7). EX1002, ¶¶196-199.

N. Claim 13

Elliott renders this combination obvious, alone or in combination with Jacob. See §IV(M) (claim 12); §IV(J) (claim 8). EX1002, ¶¶200-203.

O. Claim 15 - The non-transitory computer readable medium of claim 11, wherein the program of instructions further comprises: at least one instruction to reserve a specific one of the plurality of geographic areas for exclusive delivery of content associated with a particular one of the plurality of sponsors to application programs and having a target location contained within the specific one of the plurality of geographic areas.

Elliott renders this claim obvious, alone or in combination with Jacob. §§IV(K, L) (claims 10-11). EX1002, ¶¶204-206.

V. GROUND 2 – CLAIM 4, 9, 14 ARE OBVIOUS OVER ELLIOTT IN VIEW OF JACOB AND MUSK

A. Overview of Elliott

See IV(A). EX1002, ¶207.

B. Overview of Jacob

See IV(B). EX1002, ¶208.

C. Overview of Musk

U.S. Patent No. 6,108,650 (“Musk”) was filed August 21, 1998, and published August 22, 2000. EX1007, cover page. Musk is prior art under 35 U.S.C. §§102(a), (b), and (e) (pre-AIA). EX1002, ¶209.

Musk is generally directed to a computerized search system for “finding geographic entities, such as an address, street, area, point, business, or list of cities that are located near a given starting point.” EX1007, 1:14-17. The system improves upon “[k]nown search systems [that] typically pre-define the search radius to be used when searching.” EX1007, 1:30-31. Specifically, Musk’s system “provides a method and apparatus for performing an accelerated radius search” that includes generating a first search radius and, “[i]f the first search returns an insufficient number of results, a second search radius is generated by using [a] heuristic to increase the first search radius, and the second search radius is used to perform a second search.” EX1007, 1:47-57, 3:65-4:5, 4:61-66, 5:20-26, 5:51-56. EX1002, ¶210.

Musk is analogous art to the 296 patent and was not considered during prosecution of the 296 patent. EX1002, ¶¶211-212.

D. Motivation to Combine

A POSITA would have been motivated to further modify the teachings of the combination of Elliott-Jacob (§§IV(A)-(B)) based on the teachings of Musk

(§V(C)) because the Elliott-Jacob combination teaches a method for distributing content in the form of advertisements to end users based on the end users' locations and Musk discloses a mechanism for searching geographical regions. A POSITA would have been motivated by the teachings of Musk to implement Musk's accelerated radius search techniques with the Elliott-Jacob combination's content delivery methods to better determine whether the user is within a pre-defined distance (e.g., within a radial distance) to a sponsor's reserved geographic area. Such a combination involves a simple substitution of one known element (Musk's accelerated radius approach) with other similar elements (e.g., Jacob's means for determining the location of a mobile device) to obtain predictable results (using search radii to determine whether the mobile device is proximate to a sponsor's geographic area). Accordingly, a POSITA would have had a reasonable expectation of success in making the proposed combination given the teachings of Elliott, Jacob, and Musk. Such a combination would have required minimal modifications to the Elliott-Jacob combination to implement Musk's accelerated radius approach, and thus would have been well within the skillset of a POSITA. The proposed combination would not have required undue experimentation and would have yielded a predictable result. EX1002, ¶213.

If PO argues the portions of Elliott, Jacob, or Musk cited below relate to different, incompatible embodiments (which they do not), it would have been

obvious to a POSITA to combine such embodiments into a single system for providing the ability to deliver advertisements at least because such embodiments are described in the same prior art reference, are fully compatible with each other, and could be combined with minimal effort to achieve predictable results. EX1002, ¶214.

E. Claim 4

Elliott renders this combination obvious, alone or in combination with Jacob and Musk. EX1002, ¶215.

1. [4.pre] The method of claim 1, further comprising:

See §IV(D) (claim 1). EX1002, ¶216.

2. [4.a] determining whether at least one of the plurality of sponsors is associated with a geographical representation lying at least partially within a predetermined radial distance of a target location;

Elliott-Jacob-Musk combination disclose *determining whether at least one of the plurality of sponsors* (an advertiser) *is associated with a geographical representation* (geographic location) *lying at least partially within a predetermined radial distance of a target location* (location of mobile subscriber 110). EX1005, ¶22, ¶¶28-20, ¶36, ¶39; EX1007, ¶1:30-33. EX1002, ¶217.

Jacob discloses various methods for determining whether a geographical representation lies at least partially within a predetermined radial distance from the location of a mobile device (i.e., *a target location*) including using “geographic

coordinates...a triangulated or range data reporting of electromagnetic transmission sites, or other reported position data.” EX1005, ¶22. Jacob’s system converts the communication unit location information to the location attribute format, compares that data with advertiser location attributes, and sends the location attributes and advertisement to a communications unit if there is a match. EX1005, ¶22, ¶¶28-30, ¶36, ¶39. Musk discloses a well-known technique to determine whether a target, *i.e.*, the mobile subscriber 110, is within a distance of a geographic location in the form of a radial distance. *See, e.g.*, EX1007, 1:30-33 (“Known search systems typically pre-define the search radius to be used when searching. If no match is found, the user must manually increment the search radius by a pre-defined amount and repeat the search”). A POSITA would have understood and found it obvious to modify Jacob’s system to use Musk’s radial distance approach to determine whether a target location (*e.g.*, the location of the mobile subscriber) is within a radial distance (*e.g.*, within the search radius) of a geographic area associated with a sponsor. Such a combination involves a simple substitution of one known element (Musk’s radial distance approach) with other similar elements (*e.g.*, Jacob’s means for determining the location of a mobile device) to obtain predictable results (using a search radius to determine whether the mobile device is proximate to a sponsor’s geographic area). EX1002, ¶218.

Moreover, the 296 patent did not purport to invent new location determination technology; instead, “the location of mobile devices, or another target location, can be determined using various suitable methods.” EX1001, 4:8-10. Accordingly, a POSITA would have understood and found obvious it to modify the Elliott-Jacob combination to utilize Musk’s search radius approach to determine whether a sponsor’s geographical representation lies at least partially within a predetermined distance from the location of a mobile device. §V(D) (motivation to combine). EX1002, ¶219.

3. [4.b] in response to a negative determination, increasing the predetermined radial distance.

Elliott-Jacob-Musk combination discloses this limitation. As described above (§V(E)(2) (limitation 4.a), the Elliott-Jacob-Musk combination discloses use of a search radius to determine whether a sponsor’s geographical representation lies at least partially within a predetermined distance from the location of a mobile device. Musk further discloses that this radius is automatically increased if the search using the smaller radius returns an insufficient number of results. EX1007, 1:51-57 (“A first search radius is generated based upon the category, and the first search radius is used to perform a first search. If the first search returns an insufficient number of results, a second search radius is generated by using [a] heuristic to increase the first search radius, and the second search radius is used to perform a second search. The search is repeated until a desired results set is

returned”), 5:20-26 (“At step 205, the first search is performed using the first search radius. At step 207, if the first search returned an insufficient number of records, a second search radius is generated at 209” and “the minimum search area defined by the minimum search radius is increased to twice the previous minimum search area”), 5:51-56 (“At Step 211, the present invention uses the Second Search radius to perform a Second Search. Flow control then returns to step 207. If at step 207 the search returns a sufficient number of records, the records are ordered according to the relevance to the user as described above, and the method terminates”). A POSITA would have understood and found it obvious to employ Musk’s accelerated radius search that increases the search radius (*i.e.*, radial distance), in order to obtain a sufficient number of results (*i.e.*, greater than zero), responsive to a determination that the search yielded an insufficient number of results (*i.e.*, a negative determination). §V(D) (motivation to combine). EX1002, ¶220.

F. Claim 9

Elliott renders this combination obvious, alone or in combination with Jacob and Musk. EX1002, ¶221.

1. [9.pre] The system of claim 6, wherein the program of instructions further comprises:

See §IV(H) (claim 6). EX1002, ¶222.

2. **[9.a] at least one instruction to determine whether at least one of the plurality of sponsors is associated with a geographical representation lying at least partially within a predetermined radial distance of a target location; and**
[9.b] at least one instruction to increase the predetermined radial distance in response to the at least one instruction to determine.

Elliott-Jacob-Musk combination discloses these limitations. §§V(E)(2)-(3) (limitations 4.a-4.b). These limitations are substantially similar to limitations 4.a-4.b; however, limitations 9.a-9.b recast the limitations as “at least one instruction.” Elliott discloses and renders obvious implementing its system using instructions—“process steps and instructions of the present invention could be embodied in software” and “[c]ertain aspects of the present invention include process steps and instructions described herein in the form of an algorithm.” EX1004, ¶32. EX1002, ¶¶223-224.

G. Claim 14

Elliott-Jacob-Musk combination renders this claim obvious. *See* §IV(L) (claim 11); §V(F) (claim 9). EX1002, ¶¶225-228.

VI. DISCRETIONARY DENIAL IS NOT WARRANTED

Petitioners hereby stipulate that, if institution is granted, Petitioner will not pursue in the parallel district court litigation identified below the same grounds raised, or that could have reasonably been raised, in this petition. *Sotera Wireless, Inc. v. Masimo Corp.*, IPR2020-01019, Paper 12 at 18-19 (PTAB Dec. 1, 2020).

Pursuant to Acting Director Coke M. Stewart’s March 26, 2025, Memorandum regarding Interim Processes for PTAB Workload Management, Petitioner understands that discretionary denial issues if any will be raised in a separate brief to be filed by Patent Owner. If Patent Owner files such a brief, Petitioner intends to respond in an opposition brief consistent with Acting Director Coke M. Stewart’s March 26, 2025, Memorandum regarding Interim Processes for PTAB Workload Management. Accordingly, Petitioner will not address discretionary denial issues in this Petition.

VII. MANDATORY NOTICES UNDER 37 C.F.R. §§42.8(B)(1)-(4)

A. Real Party-In-Interest

Petitioner identifies Home Depot U.S.A., Inc., and Home Depot Product Authority, LLC is the real parties-in-interest (“RPI”). Petitioner identifies The Home Depot, Inc. as a potential RPI solely because it is also named a defendant in the related EDTX litigation.

B. Related Matters

The 296 patent is subject to the following actions: *H2 Intellect LLC v. The Home Depot, Inc., Home Depot U.S.A, Inc., And Home Depot Product Authority, LLC*, Civil Action No. 2:24-CV-00694-JRG-RSP (EDTX).

C. Lead and Backup Counsel

Lead Counsel	Backup Counsel
Jennifer Librach Nall	Nicholas G. Papastavros

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D. Service Information

Service information for lead and back-up counsel is provided in the designation of lead and back-up counsel above. Petitioner consents to electronic service to lead and backup counsel and to:

DLA-HD-H2@us.dlapiper.com

VIII. CONCLUSION

All Challenged Claims of the 296 patent should be found unpatentable for the reasons discussed in this Petition.

Date: April 4, 2025

Respectfully submitted,

/s/ Jennifer Librach Nall

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CERTIFICATE OF WORD COUNT

Pursuant to 37 C.F.R. §42.24(d), Petitioner certifies that this petition includes 12,950 words, as measured by Microsoft Word, exclusive of the table of contents, mandatory notices under §42.8, certificates of service, word count, claim listing, and exhibits.

Date: April 4, 2025

s/ Jennifer Librach Nall

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CERTIFICATE OF SERVICE

The undersigned certifies pursuant to 37 C.F.R. §§42.6(e) and 42.105 that on April 4, 2025, a true and correct copy of the Petition for *Inter Partes* Review of U.S. Patent No. 8,433,296 was served via express mail on the Patent Owner at the below correspondence address of record:

Ryan Hardin

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Houston, TX, 77277

A courtesy copy was sent to the below counsel via electronic mail:

Winston-H2@winston.com

Respectfully submitted,

/s/ Jennifer Librach Nall