

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Rocket Media, LLC d/b/a Launch Labs,

Petitioner,

v.

Fullthrottle Technologies, LLC,

Patent Owner.

Case No. 2025-00149

U.S. Patent 11,823,219

PETITION FOR *INTER PARTES* REVIEW

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Patent Trial and Appeal Board

U.S. Patent Trademark Office

P.O. Box 1450

Alexandria, VA 22313-1450

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TABLE OF ABBREVIATIONS

Abbreviation	Full Name
'219 Patent	U.S. Patent No. 11,823,219
'947 Patent	U.S. Patent No. 11,556,947
Challenged Claims	Claims 1-36 of the '219 Patent
Patent Owner	Patent Owner Fullthrottle Technologies, LLC
Petitioner	Petitioner Rocket Media, LLC d/b/a Launch Labs
POSITA	Person of Ordinary Skill In The Art

EXHIBIT LIST

Exhibit No.	Document
1001	U.S. Patent No. 11,556,947 (“the ’947 patent”)
1002	File History of the ’947 patent
1003	U.S. Patent No. 11,823,219 (“the ’219 patent”)
1004	File History of the ’219 patent
1005	U.S. Patent No. 12,051,083 (“the ’083 patent”)
1006	File History of the ’083 patent
1007	Declaration of Mr. David Williams
1008	U.S. Patent No. 8,898,074 to Doughty et al. (“Doughty”)
1009	European Patent Pub. No. 2,938,045 to Van Boucq (“Van Boucq”)
1010	U.S. Patent No. 10,311,465 to Maginnis (“Maginnis”)
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1012	Web Tracking: Mechanisms, Implications, and Defenses by Bujlow et al., July 28, 2015 (“Bujlow”)
1013	RFC 2109: HTTP State Management Mechanism, February 1997 (“RFC 2109”)
1014	Apple to ad industry: Tough luck, privacy comes first, by S. Shankland, September 15, 2017
1015	HIGH BROWSE Apple introduces update to Safari browser which could change the internet FOREVER, by J. Hamill, September 19, 2017

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1027	Federal Court Management Statistics – Comparison Within Circuit (Mar. 31, 2022), <i>available at</i> https://www.uscourts.gov/statistics/table/na/federal-court-management-statistics/2022/03/31-3 .
1028	<i>Fullthrottle Technologies, LLC v. Rocket Media, LLC (d/b/a Launch Labs)</i> , No. 1:24-cv-00314 (M.D.N.C.), Dkt. Report as of November 7, 2024.
1029	U.S. Patent Pub. No. 2007/0185978 to Montulli (“Montulli”)
1030	<i>Fullthrottle Technologies, LLC v. Rocket Media, LLC (d/b/a Launch Labs)</i> , No. 1:24-cv-00314 (M.D.N.C.), Dkt. 25 (“MTD”)
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1036	<i>What are Browser Cookies? The History of Cookies in Digital Advertising</i> , by M. Bober, <i>available at</i> https://zeropark.com/blog/what-are-browser-cookies-in-digital-advertising/ (last visited Oct. 14, 2024).

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1038	<i>Gary Krakow, Two new cellular phones built for abuse, NBC News (Apr. 14, 2004), http://www.nbcnews.com/id/4324939/ns/technology_and_science-tech_and_gadgets/t/two-new-cellular-phones-built-abuse/ (last visited Oct. 14, 2024)</i>
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1043	<i>Now websites can send push notifications—not just apps (June 10, 2013), https://www.niemanlab.org/2013/06/now-websites-can-send-push-notifications-not-just-apps/ (last visited Oct. 24, 2024)</i>
1044	<i>Apple Push Notification Service (July 24, 2024), https://theapplewiki.com/wiki/Apple_Push_Notification_Service (last visited Oct. 24, 2024)</i>

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1045	Excerpts from <i>This But in Your PC is a Smart Cookie</i> (Feb. 12, 1996), Financial Times (London), by T. Jackson, available at https://www.cyberrights.cyberjournal.org/cr-18feb96-tidbits/ (last visited Sep. 18 2024)
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1052	Catalin Cimpanu, <i>Apple blocks third-party cookies in Safari</i> (Mar. 24, 2020), available at https://www.zdnet.com/article/apple-blocks-third-party-cookies-in-safari/ (last visited Nov. 6, 2024).
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1063	<i>What is an Instance</i> , Lenovo US, available at https://www.lenovo.com/us/en/glossary/what-is-instance/?orgRef=https%253A%252F%252Fwww.google.com%252F&srsId=AfmBOooi6PnP-Pci7VF4p71hXGcKiOXpz6vFjcXD89yz7A1rms_FWIAw (last visited Nov. 6, 2024).
1064	Katie Terrell Hanna, <i>applet</i> , available at https://www.techtarget.com/whatis/definition/applet (last visited Nov. 6, 2024).
1065	<i>Clear Channel Outdoor Launches Its First Indoor Digital Billboard Network</i> (Feb. 8, 2007), available at https://investor.clearchannel.com/news/detail/465/clear-channel-outdoor-launches-its-first-indoor-digital-billboard-network (last visited Nov. 6, 2024).

I. INTRODUCTION

Petitioner Rocket Media, LLC d/b/a Launch Labs (“Petitioner”) respectfully petitions, under 35 U.S.C. §311 and 37 C.F.R. §42.21, for *inter partes* review (“IPR”) of claims 1-36 (“the Challenged Claims”) of U.S. Patent No. 11,823,219 (“the ’219 patent”) (EX1003) on the grounds below.¹

The ’219 patent claims a method for determining the effectiveness of targeted advertisements sent to internet users by tracking information about the websites they visit and other information readily available from the user’s web browser, including location. Patent Owner and the ’219 patent acknowledge, as they must, that “cookies” have been used for many years prior to the ’219 patent for tracking this same information. The ’219 patent purports to add determining the probability that the user initiated a browsing session because of an ad. This alleged addition, however, is clearly disclosed in the prior art, rendering the ’219 patent invalid.

Accordingly, Petitioner requests that the Board cancel the Challenged Claims.

II. GROUNDS FOR STANDING (37 C.F.R. §42.104(a))

Petitioner certifies that the ’219 patent is available for IPR and that

¹ Unless otherwise noted, all emphases and annotations have been added.

Petitioner is not barred or estopped from requesting IPR of the Challenged Claims on the grounds in this petition. The '219 patent issued November 21, 2023, more than 9 months ago, and Petitioner was served with the complaint alleging infringement of the '219 patent on April 17, 2024, less than one year ago. EX1028.

III. THE PATENT AND STATE OF THE ART

The '219 patent was filed November 10, 2022 and claims priority to a provisional application dated June 8, 2021. EX1003, (60), (63). For the purposes of this petition, Petitioner assumes that the priority date for the Challenged Claims is the date of the provisional application.

A. Technical Background

The '219 patent is in the field of targeted advertisements and determining the effectiveness thereof using information available from a user's web browser, such as a user's location or demographics. EX1003, 1:38-65.

1. Targeted Advertising

Targeted advertising is an idea that dates back at least to print media, e.g., ads placed in the sports or lifestyle sections of a newspaper based upon the demographics of expected readers. EX1047, 2-3. That concept of targeting advertisements migrated to each new form of media, including to television commercials and the internet. Because the internet allows more granular

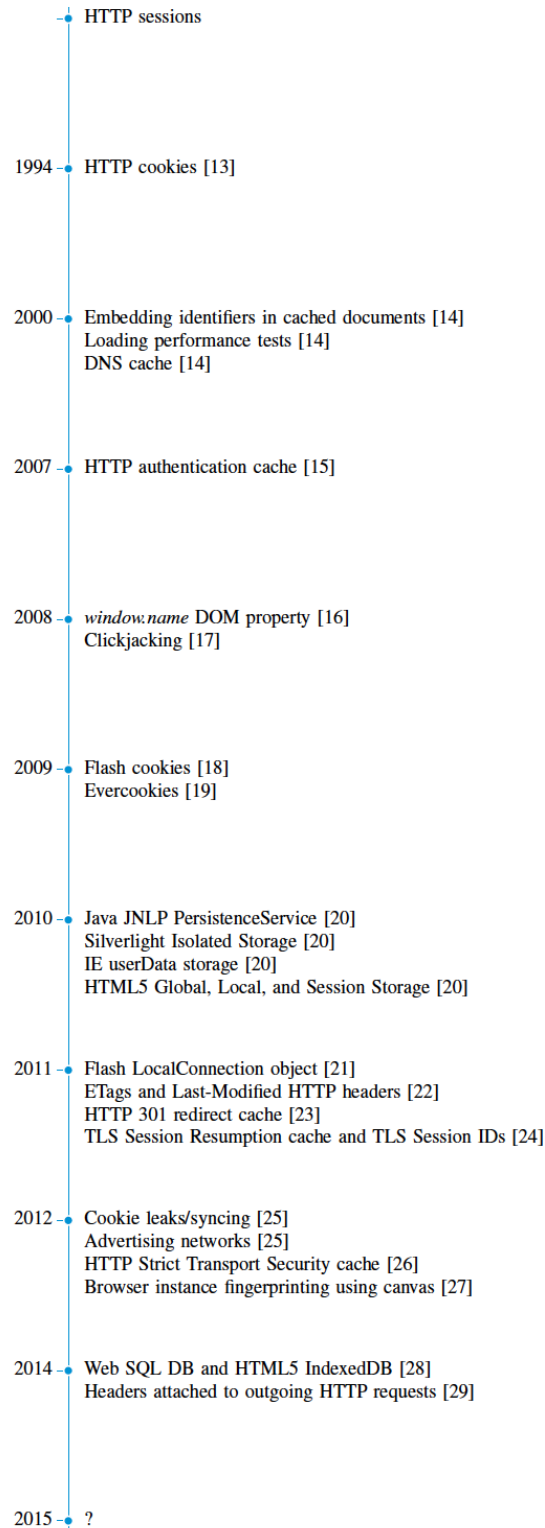
information about users to be easily obtained, advertisements can be narrowly targeted to specific groups, locations, or even individuals. EX1007, ¶61.

2. Web Browsers

Web browsers are applications through which the user can request and view different websites. Browsers date back to at least 1990, when Tim Berners-Lee (commonly known as the inventor of the internet) created the first web server and corresponding browser. *Id.*, ¶50; EX1011, 2. One of the first publicly available web browsers was Netscape, which was released to the public 30 years ago in 1994. *Id.*, ¶51; EX1011, 2. Since that time, a number of different browsers have been introduced by many different companies, including Google Chrome, Apple Safari, Mozilla Firefox, and Microsoft Internet Explorer (now Microsoft Edge). EX1007, ¶¶52-53.

For many years, browsers have used different mechanisms for tracking information to allow targeted advertisements. Tracking this information allowed advertisers to serve targeted advertisements using this information. Below is a partial timeline that depicts when different methods of tracking users via browsers were first introduced:

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Filed: November 12, 2024



EX1012, 2. We explore some below.

3. Cookies

Advertisers track information about individual users to enable targeted advertisements on the internet. Since 1994, companies have used small files often called “cookies” that would be stored with the user’s web browser. EX1007, ¶¶55-58; EX1012, 2; EX1029 (patent application on cookies filed in 1995); EX1013 (RFC 2109, dated 1997). These cookies typically would be stored in a cache associated with the user’s web browser and stay there unless and until the user deleted them. EX1012, 5; EX1007, ¶¶56-57. These cookies would include information about the user based upon her browsing history, e.g., websites the user visited and location data of the user. EX1007, ¶¶56-58. Cookies also stored other information available via the web browser, including IP address, language, browser type, time, and date. Cookies have many purposes beyond just serving targeted ads, including remembering the user’s preferences and remembering a username to make logging in easier. *Id.* Because the cookie stored information about a specific user, cookies commonly contained a unique identifier such that the advertiser can later identify the user. EX1012, 2 (indicating that identifiers were embedded in cookies by 2000); EX1007, ¶91.

Some cookies allow multiple third-party websites to access the same information in a single cookie. All of those third-party websites could then use

that cookie's information to serve targeted advertisements to the user. Those cookies were sometimes referred to as "third-party cookies." EX1007, ¶62.

Starting around 2017, certain browsers began deprecating the use of third-party cookies due to privacy concerns. *Id.*, ¶¶62-63; EX1014; EX1015. These browsers, however, typically still allow "first-party cookies" that are not shared across multiple websites (i.e., each website (first-party) uses its own cookie). EX1007, ¶¶62-63; EX1014. In other words, the *access* to individual cookies changed, *not* the information stored therein or the purpose of storing that information.

4. Pixel Tags

Another way that advertisers track information about a user is via pixel tags. Tracking pixels are invisible image files ("pixels") served with a web page and stored on the user's computer in the local browser cache. EX1007, ¶¶65-67. These pixels send information from the user's browser to the website that sent them. *See id.* Tracking pixels, like cookies, are associated with a specific user and contain a unique ID for the user so they may be tracked across different devices. *Id.*; EX1008, 16:51-17:27.

5. Location Tracking

Determining the location of a device on the internet likewise has a long history. For example, by the 2000s there were multiple tools that could be used to

approximate the user’s location, including GPS, IP address lookups, and access point triangulation. EX1007, ¶¶73-87; *e.g.*, EX1016 (U.S. Patent No. 6,757,740); EX1017 (RFC 2782).

Furthermore, since the early 2000s, application programming interfaces (“APIs”) were available to translate a latitude/longitude coordinates to a physical address. EX1007, ¶¶88-90. This process of translating a latitude and longitude into a physical address is referred to as “reverse geocoding.” EX1007, ¶89; EX1010, 9:19-25; EX1020 (Google’s reverse geocoding API in 2019); EX1021 (same); EX1022 (reverse geocoding on Google and other map vendors); EX1023 (Bing’s reverse geocoding in 2018); EX1024 (Microsoft’s reverse geocoding in 2017); EX1025, 35 (Apple’s reverse geocoding in 2019).

6. Unique IDs

Unique identifiers have been used throughout history to identify people, places, and things. Common examples that predate the internet include: the International Standard Book Number (ISBN) to identify books, driver’s license numbers or passport numbers to identify people, Vehicle Identification Numbers (VIN) to identify cars, and country codes to identify countries in a phone number. The internet likewise uses many different unique identifiers, all of which predate the alleged invention, including Media Access Control (MAC) numbers, IP addresses, and Autonomous System Numbers (ASN). EX1007, ¶91. Even cookies

already contained unique identifiers prior to the alleged invention. EX1012, 2; EX1007, ¶¶92-93.

These unique identifiers are, by definition, unique to the person, place, or thing that they identify and the assigning entity must know the correspondence between the ID and the person, place, or thing so they can be identified later.

EX1007, ¶¶91-93.

B. The '219 Patent and Its Prosecution History

The patent explains that businesses that market products on websites, like car dealerships, are often “interested in learning more information about the potential customer.” EX1003, 1:15-28. The patent recognizes web browsers already tracked this information by using “tracking cookies” or “full cookies,” as explained more above. *Id.*, 11:29-38, 13:16-21. According to the patent, however, certain browsers may not allow storing these full cookies. *See id.* To solve this alleged deficiency, the patent proposes generating a “unique ID” for a user based upon the data received from the browsing session and storing the same information that was already stored in cookies. *Id.*, 12:33-43. The patent explains that, even if cookies are disallowed, the unique ID may still be stored in the local browser cache, allowing the website to recognize the user on return visits and pull up the user’s profile that contains the associated data from prior browsing sessions. *Id.*,

13:16-21, 14:31-43. Then, the user's profile may be updated on each subsequent browsing session. *Id.*, 46:25-37.

This process of receiving data from the browser **504** and assigning a unique ID **508** is depicted in Figure 5.

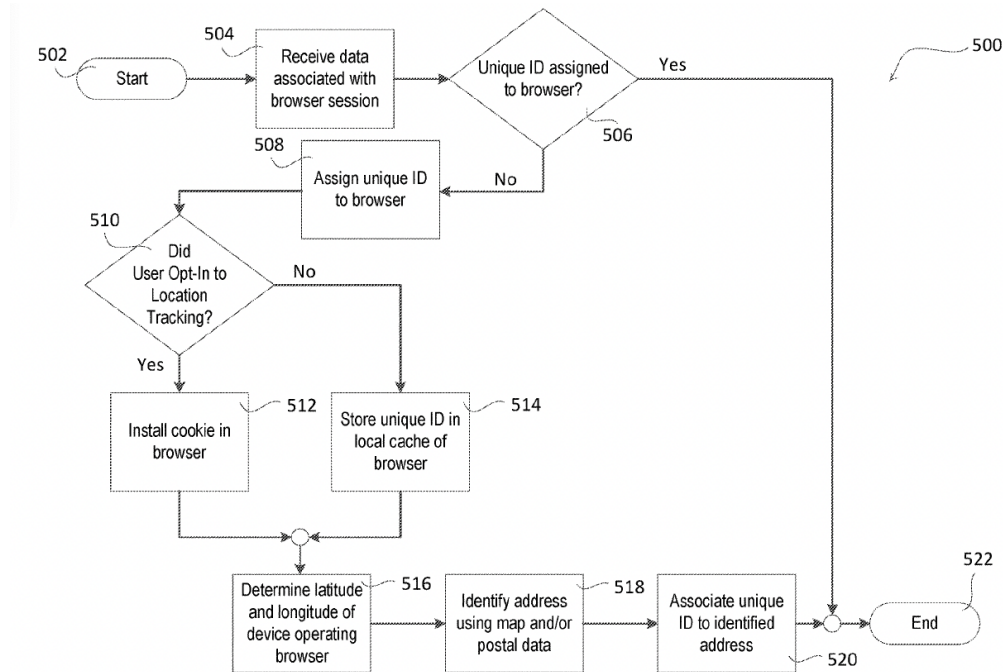


FIG. 5

The patent further explains that the user's location may be associated with the profile. But the patent states that users may either opt-in to or opt-out of allowing the browser to explicitly track her location **510**. *Id.*, 9:57-10:3. If the user opted-in to location tracking, the patent explains that the user's location can be determined from the location tracker in the browser, e.g., via a cookie **512**. *Id.*, 12:49-13:15. But if the user opted-out of location tracking, the latitude and longitude of the user may still be determined by using the IP address, router

location, or location data on a mobile device **516**. *Id.*, 7:3-18. The patent recognizes that pre-existing map APIs (e.g., Google Maps) may then be used to determine the physical address associated with the location **518**. *Id.*, 7:19-29.

After collecting this information, the patent explains that the user's profile may be updated every time the user visits a URL. Figure 16 below builds on Figure 5 (steps **1602-1620**) by adding the steps of updating the user's profile **1624**.

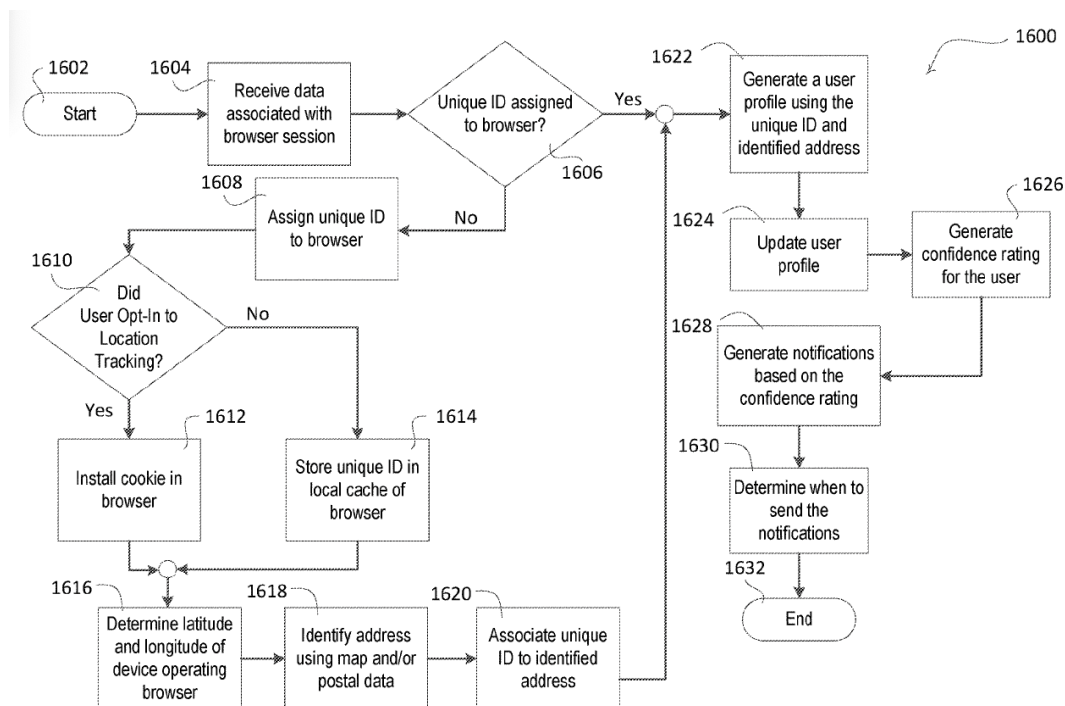


FIG. 16

Based upon the user's profile, the website can a "generate confidence rating for the user" that indicates the "user's interest in a product" **1626**. *Id.*, 46:12-24. Based upon the confidence rating, the website may generate and send advertisements ("notifications") to the user **1628**, **1630**. *Id.*, 47:9-34.

After serving the ad, the patent describes receiving data about the campaign to determine the probability that the user's browser session was "initiated in response to watching/listening to media associated with the campaign" **1010**. *Id.*, 25:13-62, Fig. 10. This determination can be based upon factors, such as the location of the user (e.g., user's zip code). *Id.*

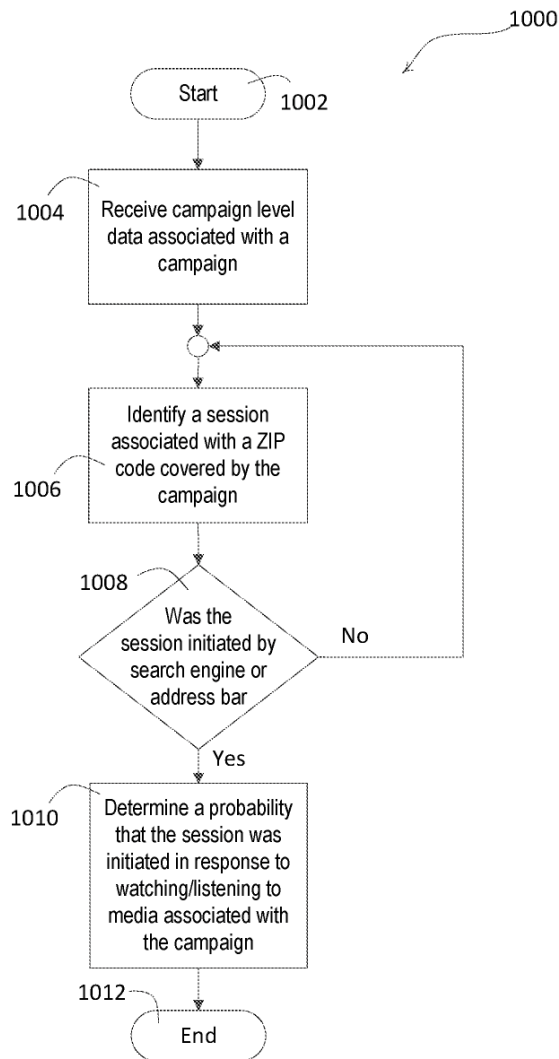


FIG. 10

The '219 patent has two independent claims. Claim 1 is representative:

1. A method comprising:

- receiving campaign level data associated with a campaign;
- receiving anonymous data associated with a browser session initialized by a user via a browser on a user computing device;
- determining that the user accessed a uniform resource locator (URL) during the browser session;
- determining a latitude coordinate and a longitude coordinate of the user computing device, during the browser session, wherein the latitude coordinate and the longitude coordinate are determined based on the anonymous data upon determining that the user opted-out of location tracking, and wherein the latitude coordinate and the longitude coordinate are determined based on geo-location data retrieved from the user computing device upon determining that the user opted-in to location tracking;
- identifying a physical address for the user based on the determined latitude coordinate and the determined longitude coordinate using a map application programming interface (API);
- determining that the physical address is within a ZIP code covered by the campaign;
- determining that the browser session was initiated by the user with an intent to visit the URL; and
- determining a probability that the browser session was initiated in response to watching or listening to media associated with the campaign using the campaign level data.

Independent claim 19 is similar, but claims a non-transitory, machine-readable storage device. The dependent claims are generally directed to specific information for the anonymous data or campaign data. *E.g., id.*, cl. 2, 4-9, 15.

C. POSITA

The relevant art for the '219 patent is the field of computer science generally, and specifically computer networks. EX1007, ¶¶44-47. A person of ordinary skill in that art, as of June 2021, would have been an individual with either (1) at least a bachelor's degree in computer science, computer engineering, electrical engineering, or an equivalent field plus at least one year of experience working on computer networking, or (2) at least 3 years of experience working on computer networking, even without a formal degree. *Id.*

IV. CLAIM CONSTRUCTION

Claim terms must be given their ordinary and customary meaning, which is the meaning a POSITA would have given the term at the time of the alleged invention, considering the entire patent and file history. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-13 (Fed. Cir. 2005). All terms of the '219 patent should be given their plain and ordinary meaning for purposes of this proceeding. In response to Petitioner's Motion to Dismiss in the parallel litigation (EX1030), Patent Owner advocated for specific constructions:

Term	Proposed Construction
(1) "location tracker"	"the third-party tracking cookie described in the patent specification ('tracker (e.g., cookie)')" (EX1031, 15-16)
(2) "upon determining that the user	"upon determining that the user opted-out of location tracking by the lack of a

Term	Proposed Construction
opted-out of location tracking”	(“tracker (e.g., cookie)”)” (EX1031, 16)
(3) “unique identifier”	“unique to the user and whose correlation to the user is known by the assignor” (EX1031, 16)
(4) “determining that the user has not been assigned a unique identifier”	“a ‘unique identifier’ that was not previously assigned when it was previously determined that the user had opted out of location tracking” (EX1031, 16)

Term 1. Patent Owner’s proposal for “location tracker” limits the location tracker to “third-party tracking cookies described in the patent specification.”

Petitioner agrees. At minimum, third-party tracking cookies are an example of the claimed location tracker, and the prior art discloses or renders obvious this construction.

Term 2. Patent Owner’s second proposed construction rearranges the claim language and refers back to the construction of “location tracker” and therefore does not change the scope of the claims. Petitioner agrees.

Term 3. A POSITA would have understood that assigning a “unique identifier to the user” means the identifier is “unique to the user” and that the assignor of the identifier would know the correlation to the user. EX1007, ¶121. Petitioner therefore has no issue this proposed construction.

Term 4. Patent Owner’s proposal makes clear that the determination that the user has not been assigned a unique identifier is based upon whether the user

was previously assigned a unique identifier when the user opted-out of location tracking. Petitioner agrees and addresses it below.

Petitioner is not aware of any other dispute as to the meaning of any terms in the Challenged Claims, but reserves the right to address any raised by Patent Owner.

V. SUMMARY OF CHALLENGE AND RELIEF REQUESTED

A. 37 C.F.R. §42.104(b)(1): The Challenged Claims

Petitioner requests IPR and cancellation of the Challenged Claims (claims 1-36) in view of the references below.

B. 37 C.F.R. §42.104(b)(1): Prior Art Overview and Specific Grounds of Rejection

1. Doughty

Doughty is a U.S. Patent entitled “Creation of a Universal Profile of a User by Identifying Similar User-Managed Assets on a Plurality of Devices of the User.” EX1008. Doughty issued on November 25, 2014, and therefore is prior art to the ’219 patent by almost 7 years. Doughty was not before the examiner during prosecution.

Doughty is in the same field as the ’219 patent: tracking information about an internet user to send targeted advertisements. More specifically, Doughty details a system for creating a “universal profile” for each user that includes information about the URLs the user visits and that may be updated with each

successive website visit. EX1008, 6:1-30. For each profile, Doughty discloses “assign[ing] a unique identifier.” *Id.*, 10:45-50. Doughty explains that a lot of information that may be stored in this profile, including the user’s “location,” “age, age range, or birthdate,” “zip code,” “gender,” “home address.” *Id.*, 8:13-56. Doughty further discloses that the “geographic location” of the user may be determined as geographic coordinates by a number of different methods, including “GPS, triangulation, Wi-Fi triangulation, and the like.” *Id.*, 19:27-48. The determined location will then be stored as part of the user’s profile as a physical address (home or work). *Id.*, 8:35-56.

Based upon this information in the profile, Doughty discloses selecting and transmitting advertisements to the user based upon a “relevancy score between the universal profile and advertisements.” *Id.*, 12:45-65. For example, the Doughty system may determine that it is time to send an ad when the relevancy score reaches a particular threshold. *Id.*, 12:61-65.

2. Overview of Van Boucq

Van Boucq is a European patent publication entitled “Geolocation Method.” EX1009. Van Boucq was published October 28, 2015, and is therefore prior art to the ’219 patent by nearly 6 years. Van Boucq was not before the examiner during prosecution.

Like the '219 patent and Doughty, Van Boucq is also in the field of targeted advertisements on the internet. *Id.*, ¶1. Van Boucq more specifically discloses different methods of locating the user, including methods for determining a location depending upon whether the user opted-in or opted-out of location tracking. Specifically, Van Boucq explains that, where the user has consented to be geolocated, the system may look for a “connection cookie” associated with the browser to determine the location. *Id.*, ¶60. If, on the other hand, the “Internet user refuses to be geolocated or ignores the pop-up” (i.e., opts-out), “the communication system ***will still locate the Internet user according to the IP address*** 290 of that user’s connection to a computer network.” *Id.*, ¶63.

3. Smith

Smith is a United States Patent entitled “Location analytics systems and methods.” EX1032. Smith issued on March 25, 2014 and is therefore prior art to the '219 patent by 7 years. Smith was not before the examiner during prosecution.

Like Doughty and Van Boucq, Smith is in the same field as the '219 patent: advertising using location determinations. Specifically, Smith focuses on the determination of whether a particular advertisement or advertising campaign was successful based upon a determination of the user’s location. For example, Smith discloses that advertisements may be “provided through media outlets, such as ***television, radio, and the internet*** via television commercials, radio commercials

and webpage advertisements.” EX1032, 1:13-15. Smith further recognizes that, in other instances, “*promotions are provided at specific geographic locations*, such as billboards, visible signs (e.g., store-front banners), in-store displays, presentations, and the like.” *Id.*, 1:20-22.

According to Smith, to determine the success of advertisements that are provided at specific geographic locations, the system can determine the geographic location of the user when they access the required content, such as by using GPS coordinates or “a reverse lookup based on a device’s internet protocol (IP) address.” *Id.*, 5:2-3. Smith explains that the location of the user can be used to determine the “effectiveness” of an advertisement based upon, for example, “the proximity of the geographic location of the visitor to the” geographic location of the advertising campaign. *Id.*, 2:5-16.

C. Grounds of Rejection

Petitioner asserts the following specific grounds:

Ground	Claims	Basis	Prior Art
1	1-36	§103	Doughty over Van Boucq and Smith
2	1-36	§103	Doughty over Van Boucq, Smith, and Maginnis

VI. GROUND 1 –DOUGHTY OVER VAN BOUCQ AND SMITH

A. Claim 1

1. 1[pre]: “A method comprising:”

Doughty alone or in combination with Van Boucq and Smith discloses this

limitation. In its own words, Doughty discloses “improved **methods**” “directed to targeting advertising to mobile and non-mobile communication facilities accessed by the same user.” EX1008, 5:28-30. Van Boucq similarly discloses “a geolocation **method** for delivering advertisements.” EX1009, ¶1. In other words, just like the ’947 patent, Doughty and Van Boucq both disclose methods of delivering targeted advertisements using the user’s location. EX1007, ¶245.

Furthermore, Smith also discloses a method for determining the geographic location of a user to determine the effectiveness of an advertising campaign. EX1032, Abstract (“The **method** includes receiving a geographic location of interest, ... determining, by a computer, an effectiveness of the geographic location of interest based at least in part on the proximity of the geographic location of the visitor to the geographic location of interest, and storing the effectiveness determined.”).

In other words, just like the ’219 patent, the combination of Doughty, Van Boucq, and Smith discloses a method of delivering targeted advertisements using the user’s location and determining the effectiveness thereof. EX1007, ¶¶246-247.

(a) Motivation to Combine Doughty and Van Boucq

Doughty describes finding the user’s location to help with its targeted advertising method, but does not expressly detail how to determine the user’s location beyond identifying a number of known methods. A POSITA thus would

have been motivated to look at other references in the same field of targeted advertising on the internet that provide further detail regarding the methods identified by Doughty and how to determine the user's location, such as Van Boucq. EX1007, ¶130. A POSITA would have likewise found it obvious to implement the geolocation methods described in Van Boucq to determine the user's location as already contemplated by Doughty. In fact, Doughty encourages a POSITA to seek out modifications. EX1008, 26:44-51. It would then be a trivial matter to store that location in the user profile described in Doughty, particularly since Doughty already discloses storing location with the user's profile. *Id.*, 8:35-56; EX1007, ¶¶131-132.

Furthermore, a POSITA would have had a reasonable expectation of success at least because Doughty describes multiple ways to determine the user's location, including "a previous location; a current location; coordinates of a mobile communication facility; location determined by GPS, triangulation, Wi-Fi triangulation, and the like; location determined by a user entering a region, a state, a city, or the like; location determined according to a distance from a specified location, a location associated with a mobile content; and the like." EX1008, 19:40-46. Implementing the various methods for determining the user's location would have been well within a POSITA's abilities, especially in view of Van Boucq's teachings that further describe how to implement these methods. And

again, Doughty encourages a POSITA to seek out modifications. EX1008, 26:44-

51. In light of those disclosures, a POSITA would have understood that any method of determining a user's location, including those described in Van Boucq, could be used to determine the location for storage in the user's profile in Doughty. EX1007, ¶¶131-132. Indeed, a POSITA would have understood that incorporating Van Boucq's user location teachings to Doughty would have been applying a known technique to a known system ready for improvement to yield predictable results. *Id.*

A POSITA would have therefore understood that Doughty over Van Boucq renders obvious a targeted advertising method comprising the following steps. *Id.* These same motivations to combine apply to each of the limitations below, but further motivations to combine are described in connection with other limitations below.

(b) Motivation to Combine Doughty, Van Boucq, and Smith

A POSITA further would have been motivated to combine Doughty and Van Boucq with Smith. Doughty discloses using a "relevancy score" to determine when to send an advertisement to the user based upon how relevant an advertisement is to the user's profile. EX1008, 12:45-65. And, Van Boucq explicitly recognizes that the system should deliver "the most relevant ads possible, namely ads from advertisers whose points of sale are close to the user's

geolocation.” EX1009, ¶4.

Smith continues upon this general theme of targeted advertising, including location-based advertising. First, Smith teaches that advertisers “often employ various forms of marketing” that can “require a large financial investment.” EX1032, 1:6-24. Smith further explains that advertising campaigns may span different media outlets, like television, radio, and the internet. *Id.*, 1:13-15. Smith recognizes that advertisers “often desire to track the effectiveness of their marketing techniques.” *Id.*, 1:29-30. For example, according to Smith, advertisers “may desire to know how many customers visit a website as ***a result of a particular advertisement.***” *Id.*, 1:31-33.

Because, as Smith recognizes, there are often multiple forms of advertisement—including the internet, TV, radio, billboards, in-store displays—a POSITA would have understood that the success of an overall advertising campaign may be attributable to different components of the campaign. For example, a user may click on an internet ad and be taken to website or a user may instead see a billboard advertisement and then type the website address into her browser. EX1007, ¶¶234-235. And, a POSITA would have recognized that, by 2021, mediums like billboards, in-store displays, and other ads with physical locations were commonly digitized, which would have made it more obvious to a POSITA to combine Smith with Doughty and Van Boucq. *See* EX1046; EX1007,

¶¶234-237. A POSITA would have understood that, as Smith teaches, because there are different financial costs associated with each of these different advertisements (each of which could reach different demographics and numbers of users), advertisers would have wanted to know which form(s) of advertisement successfully attracts customers. EX1032, 1:31-33; EX1007, ¶¶234-237.

Smith explains that, although website clicks on internet advertisements can be tracked, it can be more difficult to track the success of other advertising components, like a “roadside billboard, a visible sign (e.g., a store-front banner), an in-store display, a presentation, or the like.” EX1032, 1:48-50. To solve this problem, Smith discloses a method for advertisers to determine the probability that their advertising campaign was successful based upon the user’s location. For example, Smith explains that the system can determine the effectiveness of the ad “based at least in part on the proximity of the geographic location of the visitor” to the advertisement. *Id.*, 2:12-15.

Since Doughty and Van Boucq already disclose determining the user’s location when she visits a website, a POSITA would have found it obvious to use that location to help determine the probability that a particular advertisement was successful, including based upon the user’s location being close to an advertisement. EX1007, ¶¶238-239. A POSITA would have understood that determining the success of an advertisement is a natural extension of determining

when to serve an advertisement. *Id.*, ¶240. Furthermore, because Doughty is directed to creating a “universal profile” of the user that is not limited to the websites visited on a single device, a POSITA would have been motivated to provide more global information about the user’s browsing behavior. Indeed, Doughty encourages a POSITA to seek out modifications. EX1008, 26:44-51.

A POSITA would have been motivated to incorporate Smith’s teachings to the combination of Doughty and Van Boucq because doing so provides advertisers with information about the success of each different component in an advertising campaign. A POSITA would have understood that this information would be valuable to advertisers because it shows which media outlets generated the most interest and were therefore worth the financial investment. EX1007, ¶¶239-240.

A POSITA would have had a reasonable expectation of success at least because Doughty already tracks all of the information for determining advertising success, including the URL visited, the location of the user when it is visited, and the order in the browsing session the URL is visited. EX1008, 6:19-25. A POSITA would have found it obvious to use this information to determine the probability that the user initiated a browsing session due to a nearby advertisement based upon “the proximity of the geographic location of the visitor to the” geographic location of the ad, as disclosed in Smith. EX1032, 2:5-16.

A POSITA would have therefore understood that Doughty over Van Boucq

and Smith renders obvious a targeted advertising method comprising the following steps. EX1007, ¶¶233-242. These same motivations to combine apply to each of the limitations below, but further motivations to combine are described in connection with other limitations.

2. 1[a]: “receiving campaign level data associated with a campaign;”

Doughty and Smith each render obvious this limitation.

Doughty discloses “selecting a sponsored content based on a relevancy thereof with the universal profile” and then “transmitting the sponsored content to the second communication device for display thereon.” EX1008, 8:35-39. A POSITA would have understood that, for a system to select and transmit “sponsored content” or an advertisement, the system must first receive campaign level data for the advertising campaign so the system will know which users to target. EX1007, ¶249. For example, Doughty discloses that the ads are served based upon a number of factors, including age of the user, marital status, religion, zip code, employment, and income. EX1008, 8:39-56. A POSITA would have understood, or it would have been obvious to a POSITA, that the system must receive this target demographic information about the advertising campaign so it can match those characteristics to the user. EX1007, ¶249.

Doughty also discloses receiving campaign level data associated with users’ interactions with an ad. For example, Doughty contemplates charging for ads

based on a number of different criteria, including “impression-based (e.g., cost per thousand impression, or CPM), cost-per-click (CPC), cost-per-action (CPA), cost-per-engagement (CPE), time-based.” EX1008, 22:49-54. A POSITA would have understood that, to charge based upon those metrics, the system would need to track or receive that data for each campaign. For example, the system in Doughty would have to receive/track the number of impressions to charge an advertiser based upon the number of impressions. EX1007, ¶250.

Furthermore, Smith discloses a system for assessing the “effectiveness of one or more promotions at one or more promotion locations.” EX1032, 4:34-43. Smith explains that these promotions (or ads) are associated with a “marketing campaign.” *Id.*, 1:23-36. A POSITA would have understood that, to assess the effectiveness of the ads within the advertising campaign, the system must first receive information about the ads at a campaign level, including all of the different promotions and the locations thereof. EX1007, ¶251. Alternatively, it would have been obvious to a POSITA that the system must receive campaign level information about an advertising campaign in order to assess the effectiveness of the different components in that campaign as contemplated by Smith. EX1007, ¶252. This is because, without information about the entire campaign, the system would not be able to assess the effectiveness of the promotions within the overall

campaign—e.g., if two ads are relatively close together, or if there is an internet component in addition to a billboard component. EX1007, ¶252.

Furthermore, like Doughty, Smith also discloses receiving campaign level data associated with which users saw an ad. For example, Smith discloses tracking interactions with a particular website to determine which of those interactions are indicative of the effectiveness of an ad. EX1032, 12:54-13:56. Smith discloses tracking at least the time, date, and location of the interaction. EX1007, ¶253.

3. 1[b]: “receiving anonymous data associated with a browser session initialized by a user via a browser on a user computing device;”

Doughty discloses and/or renders obvious this limitation. Doughty discloses “receiv[ing] information relating to the user’s activity.” EX1008, 10:34-40.

Doughty explains the received information can include anonymous “information, such as the *IP address*” and “the *type of browser*.” *Id.*, 17:18-19. Doughty also explains that the system can track information related to specific browser sessions, including “one or more of: (a) a *URL* of each respective web page; (b) a *time* of visiting each respective web page [which a POSITA would have understood includes the *date*]; (c) a duration of visiting each respective web page; (d) an order in with each web page is visited; and (e) a *geographic location* of the first and second device at the time of visiting each respective web page.” *Id.*, 6:19-25; EX1007, ¶¶254, 137-138.

Given that Doughty discloses tracking the URL, time of visiting, duration of visiting for each web page, and order of each web page, a POSITA would have understood that Doughty discloses tracking “data associated with a first browsing session initialized by a user via a browser on a user computing device.” EX1007, ¶139. This is because the URL, time, duration, and order are all metrics associated with a user’s browser session. *Id.* Furthermore, Doughty also discloses that it can track information about the user across a “plurality of devices of the user,” each of which would have its own browser session. EX1008, Title (54). A POSITA would therefore understand that Doughty discloses tracking the user information for a particular browsing session. EX1007, ¶¶140.

Furthermore, a POSITA would have understood that browsing sessions are initialized by a user, either by clicking a link or otherwise opening a browser. EX1007, ¶143.

In sum, Doughty discloses receiving anonymous information about a user’s first browser session. EX1007, ¶¶137-43. A POSITA would have understood (or it would have been obvious) that this information is sent from the user’s computing device to the system because that information originates at the user’s computing device. *Id.*

Alternatively, it would have been obvious to a POSITA to track this information about the user based upon the user’s browsing sessions, particularly

because, as disclosed above, Doughty already discloses tracking the URL, time of visiting, and duration of visiting for each web page and also tracking information across multiple devices with different browsing sessions. *Id.*, ¶142.

4. 1[c]: “determining that the user accessed a uniform resource locator (URL) during the browser session;”

Doughty discloses and/or renders obvious this limitation. Doughty discloses tracking the URL of “each respective web page” visited by a user, including “an order in which each web page is visited.” EX1008, 6:19-25. By tracking respective web pages and the order in which they are visited, a POSITA would have understood that the system is determining that the user accessed a URL during a particular browsing session. EX1007, ¶¶255, 144.

Alternatively, it would have been obvious to a POSITA to determine that the user accessed a particular URL during a particular browsing session (including different browsing sessions on different devices) for the reasons in 1[a]. EX1007, ¶145.

5. **1[d]: “determining a latitude coordinate and a longitude coordinate of the user computing device, during the browser session, wherein the latitude coordinate and the longitude coordinate are determined based on the anonymous data upon determining that the user opted-out of location tracking, and wherein the latitude coordinate and the longitude coordinate are determined based on geo-location data retrieved from the user computing device upon determining that the user opted-in to location tracking;”**

Doughty in combination with Van Boucq renders obvious this limitation. As detailed for 1[b], Doughty discloses tracking anonymous information, including URLs accessed and location data, during a first browser session.²

Van Boucq further teaches as follows:

Opt-in. When the system determines the user opted-in, Van Boucq explains that the system may determine the location of the user in a number of ways, including “via a Web browser geolocation service” or in a “cookie” where the user has already previously been geolocated. EX1009, ¶¶8, 63. In either case, a POSITA would have understood that the location is “determined based on geolocation data retrieved from the user’s computing device”—either from the browser or a cookie on the local browser cache (*see* 1[f]), both of which are on the user’s computer. EX1007, ¶¶256, 169.

² To the extent this limitation inherently requires first determining whether the user opted-in to or out of location tracking, this limitation is described in limitation 3[c], which is incorporated here by reference.

Opt-out. When the system determines the user opted-out, Van Boucq states that the user can be geolocated “according to the IP address 290 of that user’s connection to a computer network.” EX1009, ¶63. A POSITA would have understood that the location is therefore determined based upon the IP address of the user’s connection, which the patent claims as “anonymous data.” *See supra* 1[a]. And, the IP address was received by the system in Doughty as set forth in 1[a]. EX1001, 6:44-47; EX1007, ¶170.

Location includes latitude and longitude coordinates of the user’s computing device. A POSITA would have understood that geolocation typically results in a location based upon the latitude and longitude of the location. EX1007, ¶171. Indeed, Van Boucq explicitly contemplates that the geolocation is done in terms of latitude and longitude. EX1009, ¶¶9, 56. Doughty too contemplates receiving “geographic coordinates” (i.e., latitude and longitude coordinates) as location data. EX1008, 6:55-7:10, 16:9-27; EX1007, ¶171. Smith similarly contemplates receiving “geographic coordinates.” EX1032, 4:65-67.

6. **1[e]: “identifying a physical address for the user based on the determined latitude coordinate and the determined longitude coordinate using a map application programming interface (API);”**

Doughty in combination with Van Boucq renders obvious this limitation. As in 1[d], Doughty over Van Boucq describes determining the latitude and longitude of the user, whether the user opted-in to or out of location tracking.

Van Boucq further recognizes that geolocation can involve APIs, such as those associated with a browser like “Google Service Location,” “Microsoft Service Location,” and “Apple Location Service.” EX1009, ¶¶31-36. A POSITA would have understood that each of those services also can be used to turn latitude/longitude coordinates into physical addresses. EX1007, ¶¶258, 173. Converting latitude/longitude coordinates into physical addresses, a process called “reverse geocoding,” was well-known by at least the provisional’s date. *Id.*; EX1010, 9:19-25; EX1020; EX1021; EX1022; EX1023; EX1024; EX1025, 35.³

Because Doughty specifically discloses storing home, work, and billing addresses (i.e., real, physical addresses), a POSITA would have been motivated to use these reverse geocoding APIs to turn the geographic coordinates into physical addresses based on those coordinates. EX1007, ¶174. And, it would have been obvious to do so given the ubiquity of reverse geocoding APIs and the explicit disclosure of location services APIs in Van Boucq. *Id.*

7. 1[f]: “determining that the physical address is within a ZIP code covered by the campaign;”

Doughty and Van Boucq or Doughty/Van Boucq with Smith render this limitation obvious.

³ These references are added solely for the purposes of illustrating that reverse geocoding APIs were commonly known and within the knowledge of a POSITA. They are not part of this ground.

Doughty and Van Boucq. As in 1[e], Doughty and Van Boucq specifically contemplates determining the physical address of the user, which would include the user's zip code. EX1009, ¶¶31-36; EX1008, 8:13-56; EX1007, ¶260. Doughty further discloses selecting an advertisement based on the user's zip code. EX1008, 8:39-56. A POSITA would have understood, or it would have been obvious, that serving an ad based on the user's zip code would have required a determination of whether or not the user is within the targeted zip code. EX1007, ¶260. Indeed, Doughty recognizes that there are some advertising campaigns that are for limited geographic areas (e.g., local movie theaters) and therefore it would have been necessary to determine if a user is located within a particular zip code to figure out if the user should be served an ad. EX1008, 17:60-18:3.

Doughty/Van Boucq with Smith. Smith similarly discloses determining whether the user is located “within a specified region” when she visits a website. EX1032, 13:19-26. Smith also explains that the location determination of a user can be based upon “a zip code.” *Id.*, 4:65-5:6. A POSITA therefore would have understood, or it would have been obvious, that determining whether the user is within a specified region would thus be based upon a determination of whether the user's location is within a particular zip code. EX1007, ¶261. This determination of whether the user is within a specific zip code would then be used in the next two steps (1[g], 1[h]) to determine the effectiveness of an ad. *Id.*

8. 1[g]: “determining that the browser session was initiated by the user with an intent to visit the URL; and”

Doughty/Van Boucq with Smith render this limitation obvious. As in 1[b], Doughty and Van Boucq render obvious receiving anonymous data for a browser session, including the location of the user and websites visited during the browser session and order of websites visited. EX1007, ¶263.

Smith discloses an “effectiveness processing module” that “assess[es] an effectiveness of a promotion 110 at a geographic location (e.g., promotion location) 112.” EX1032, 4:32-42. Smith gives the following example: “[a] roadside billboard at a given geographic location may be viewed as effective (or at least more effective) where analytics data indicates a large number [of] users visits to a website advertised by the billboard, and *the user’s [sic] are in close proximity to the billboard at or near the time of initiating the website visit* and/or during the website visit.” *Id.*, 3:40-45.

As such, Smith discloses determining whether the user initiated a browser session with an intent to visit the website based upon their location being near the advertisement. A POSITA would have understood this to mean that Smith discloses determining that a browser session was initiated by the user with an intent to visit that specific URL, such as the website advertised on the billboard in this example. EX1007, ¶¶264-265.

Additionally or alternatively, Smith also discloses that the effectiveness module can assess whether the browser session was initiated with an intent to visit a website based upon whether the visit occurred “within a given time period (e.g., five minutes).” EX1032, 3:57-64. Although this is disclosed in the context of geographic-specific advertisements, a POSITA would have been motivated to apply the same effectiveness module determination for all types of advertisements, including “presentations and the like,” as contemplated by Smith. *Id.*, 1:51-54; EX1007, ¶266. It therefore would have been obvious that tracking website visits within a specified time period after viewing an ad would have been generally applicable to other types of advertisements, including to presentations on the user’s device—e.g., video commercials, product placements in a TV show or movie. EX1007, ¶266. A POSITA would have understood that the same effectiveness module disclosed by Smith could be applied in these situations and would have been motivated to do so because Smith already contemplated using the effectiveness module in those situations. *Id.*; EX1032, 1:51-54.

9. 1[h]: “determining a probability that the browser session was initiated in response to watching or listening to media associated with the campaign using the campaign level data.”

Doughty/Van Boucq with Smith render this limitation obvious. As in 1[g], Smith discloses an effectiveness module for determining the effectiveness of an advertisement at a specific location. Smith explains that the effectiveness module

calculates an “effectiveness index,” which may take many different forms.

According to Smith, the effectiveness index may be based upon “a geographical region of interest (e.g., within a one mile radius of a billboard), a time frame (e.g., during the time period of Apr. 1, 2011 to Apr. 9, 2011), weighting of data (e.g., assign higher weight to activities of a purchase type and assign higher weights to activity that occurs closer to promotion location 110).” EX1032, 16:37-50. Smith continues that the system may choose to assign weight to the effectiveness index score based upon how far the user is from the advertisement. *Id.*, 17:27-47 (“For example, user activity that occurs closer to promotion location 112 may be assigned more weight than user activity that occurs farther way from promotion location 112.”).

A POSITA would have understood, or it would have been obvious, that the weighting was based upon the probability that the user’s browser session was initiated in response to watching or listening to media associated with the campaign—e.g., seeing a billboard, which could be a digital billboard. EX1007, ¶269. This is disclosed in at least two ways. First, according to Smith, the closer to the advertisement (using campaign level data), the higher the probability that the user initiated the browser session in response to the ad and, accordingly, the visit is assigned a higher weight and effectiveness index. *Id.*; EX1007, ¶269.

Second, a POSITA would have understood, or it would have been obvious, to use the same weighting scheme for the elapsed time since the user saw a presentation/advertisement. For example, the more quickly the user visited a website after seeing the advertisement (using the campaign level data), the higher the probability that the user initiated the browser session in response to the ad and, accordingly, the website visit is assigned a higher probability (weight). EX1032, 17:27-47; EX1007, ¶270. And, a POSITA would have been motivated to use elapsed time for the same reasons set forth in 1[g].

B. Claim 2: “The method of claim 1, wherein the anonymous data comprises one or more of a **time**, a **date**, one or more **one or more uniform resource locators (URLs)**, a referring URL, a **browser type**, a language, an **internet protocol (IP) address**, or **location data**.”

As in 1[a], Doughty discloses and/or renders obvious receiving certain anonymous information, which would include at least *IP address*, *type of browser*, *URL*, *time*, *date*, and *geographic location*. Doughty thus discloses receiving anonymous information about a user’s first browser session, including “one or more” (at least 5 or 6) of the claimed examples. EX1007, ¶271.

C. Claim 3:

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

See claims 1, 2.

2. **3[a]: “determining that the user has not been assigned a unique identifier based on a lack of stored location data for the user computing device;”**

Doughty alone or in combination with Van Boucq renders obvious this limitation.

Doughty alone. Doughty explains that the system will “determin[e] that a pre-existing universal profile has not been created.” EX1008, 6:25-30. If a profile has not yet been created, Doughty explains that the system will set up the profile by assigning a unique identifier, which will be explained more in the next limitation. *See infra* §VI.C.3. It would have been obvious to a POSITA that, to determine whether the user has been assigned a unique identifier (i.e., has a profile set up), Doughty’s system checks whether it has previously stored the user’s unique ID by checking for a cookie or other file it previously stored on the user’s device. EX1007, ¶¶273, 147-149. Indeed, Doughty recognizes that the user’s device may include cookies or pixel tags previously served by advertisers that need to be matched to a unique ID. EX1008, 16:51-17:27. And, a POSITA would have understood that those cookies or other files in the user’s browser cache often contained location data. EX1007, ¶150.

If the user’s unique ID and location have already been stored in a cookie or other file in the browser cache, it would have been obvious to a POSITA that Doughty’s system already determined the location and therefore would have

already assigned a unique ID (because any prior data would be associated with that unique ID). EX1007, ¶¶148-150. And, a POSITA would have understood that Doughty's system checks for previously stored location information because the purpose of the system in Doughty is to consolidate all information about the user in a universal profile and, to do so, a POSITA would have understood the system must determine if the user already has an associated profile (with a location) and corresponding unique ID. EX1007, ¶¶150-151. Thus, when Doughty's system determines a profile does not exist, it is "based on a lack of stored location data for the user computing device."

Doughty over Van Boucq. To the extent Doughty does not disclose and/or render obvious this limitation, a POSITA would have been motivated to look for methods of determining whether the user has not yet been assigned a unique ID based on a lack of stored location data. Van Boucq explains that the determination of whether or not the user has a profile and unique ID may be done by checking if the Internet user already has a geolocation cookie on the computing device.

EX1009, ¶60 ("the HTTP (hypertext transfer protocol) communication protocol 220 is verified by the Web browser to determine whether *the Internet user has already previously geolocated him/herself and already has a cookie (connection cookie)*").

A POSITA would have been motivated to, and found it obvious to, check for

a similar cookie or file on the user's computer, as disclosed, in Van Boucq when making that determination in Doughty because a POSITA would have realized this is an efficient and commonly used means to determine whether the user has already been assigned a unique ID. EX1007, ¶153. Indeed, Doughty discloses storing a cookie or another file with the unique ID on the user's computer, which a POSITA would have recognized could have been used to check whether the user has already been assigned a unique ID. *Id.*; EX1008, 16:59-17:33. Thus, in addition to the motivation to combine in 1[pre], a POSITA would have understood that incorporating Van Boucq's geolocation teachings to Doughty (1) would have simply been applying a known technique to a known system ready for improvement to yield predictable results; and (2) would have been one of a finite number of identified predictable solutions for determining whether the user has already been assigned a unique ID that had a reasonable expectation of success. EX1007, ¶153.

Patent Owner's Construction. Consistent with Patent Owner's proposed construction for the claim term "determining whether the user opted-in to or out of location tracking," a POSITA would have recognized that the unique ID in the cookie or pixel tag in Doughty and Van Boucq could have been assigned based upon the determination that the user opted-out of location tracking, as explained more below for 3[c]. EX1007, ¶¶154-155. Alternatively, it would have been

obvious to a POSITA that, when the system determines the user opted-out of location tracking based upon whether a third-party cookie was installed on the user's computing device (*see* 3[c]), the system would then assign a unique ID and store it in a cookie or other file, like a pixel tag, in the user's browser cache with the location, which would later be checked for as described above. *Id.*

3. 3[b]: “assigning the unique identifier to the user;”

Doughty discloses this limitation. Doughty discloses that the system “assigns a unique identifier” to a user and then stores that unique identifier with the other user information in the profile. EX1008, 10:45-50. Doughty explains that the unique identifier may be, for example, created by hashing information about the user. *Id.*, 17:28-32; EX1007, ¶¶274, 156. A POSITA would have understood that assigning a “unique identifier to the user” necessarily means the identifier is “unique to the user” because if identifier was not unique to the user, the system would not be able to identify specific users. EX1007, ¶157. A POSITA also would have understood that the assignor of the unique identifier (e.g., website server/system) would know the correlation to the user because, without tracking that correlation between the identifier and the user, the system would not be able to identify the user later. *Id.*

4. **3[c]: “determining whether the user opted-in to or out of location tracking, based on whether a location tracker is installed on the user computing device; and”**

Doughty alone or in combination with Van Boucq renders obvious this limitation.

Doughty alone. Doughty renders obvious determining whether the user opted-in to or out of location tracking in the system in Doughty. As explained for 1[a], Doughty discloses determining and tracking the user’s geographic location as part of the user’s profile. EX1008, 6:19-25, 15:49-16:27. Doughty also recognizes that users may turn off browser cookies, which, as already explained, commonly store location data. EX1008, 17:24-27; EX1007, ¶¶275, 159. Thus, a POSITA would have understood that Doughty contemplates location tracking without cookies. Indeed, a POSITA would have understood that more and more users were opting not to share location data with websites, or allow websites to create third-party cookies, due to privacy concerns. EX1007, ¶¶159-161. And, because location tracking is important to the profile consolidation system described in Doughty, a POSITA would have understood the importance of determining the user’s location even if the user opted-out of sharing location data. EX1008, 15:18-48, 17:57-59, 20:52-64. A POSITA therefore would have been motivated to find an alternative means of locating the user in Doughty’s system, even when the user has opted-out of location sharing. EX1007, ¶161.

Furthermore, it would have been obvious to a POSITA that the system should query the user's browser to determine whether the user has allowed location sharing because the browser would store that information so that it knows whether to share the location of the user. *Id.* And, it would have been obvious to a POSITA that, to check whether the browser has enabled third-party cookies ("location trackers" under Patent Owner's proposed construction), the system could query the browser to see if third-party cookies have already been stored in the cache because, if there are cookies stored, a POSITA would have understood that the system could check the third-party cookies for previously stored location data. *Id.*

Doughty over Van Boucq. Alternatively, to the extent Doughty alone does not render obvious how to determine whether a user opted-in to or out of location tracking based on cookies, a POSITA would have been motivated to look for references in the same field of art that describe how to determine whether a user opted-in to or out of location tracking. A POSITA would have been motivated to do so because location tracking is important to the profile consolidation system described in Doughty, and therefore, a POSITA would have understood the importance of determining the user's location even if the user opted-out of sharing location data. EX1008, 15:18-48, 17:57-59, 20:52-64; EX1007, ¶¶162-164.

Van Boucq discloses making such a determination. According to Van

Boucq, “[i]f said Internet user refuses to be geolocated or ignores the pop-up, the communication system will still locate the Internet user according to the IP address 290 of that user’s connection to a computer network.” EX1009, ¶63. Because Van Boucq discloses locating the user via a different method when she opts-out, it would have been obvious to a POSITA that the system must also determine if the user opted-out of location tracking. EX1007, ¶¶163-164.

A POSITA would have also understood, however, that the user may still opt-in to location tracking even if she ignores the pop-up. For example, Van Boucq discloses that the system can determine whether the user refused to be geolocated by checking whether the web browser “already has a cookie (connection cookie)” to determine if the user has already been geolocated—i.e., the user opted-in to location tracking. EX1009, ¶63. In sum, Van Boucq discloses determining that the user opted-in to location tracking based upon a location tracker (cookie) already being installed on the user’s device, consistent with Patent Owner’s proposed construction. EX1007, ¶¶163-164. A POSITA would have understood, or it would have been obvious, that this cookie could be a third-party or first-party cookie because those were the two types of commonly used cookies. *Id.*

And, it would have been obvious to a POSITA that checking for this cookie would have been an efficient means of determining whether the user opted-out of location tracking, particularly given that Doughty already recognizes the

possibility that the user opted-out of third-party cookies. EX1008, 17:24-27;

EX1007, ¶¶163-164. A POSITA would have been motivated to combine this method of determining whether the user opted-out of location sharing with the system in Doughty because, as described above and in 3[a], a POSITA would have understood the importance of determining the user’s location for profile consolidation. EX1008, 19:37-49; EX1007, ¶¶163-164.

5. 3[d]: “sending, upon determining that the user opted-out of location tracking, the unique identifier to the user computing device for storage in a local browser cache.”

Doughty in combination with Van Boucq renders obvious this limitation. As discussed in 3[c], Doughty alone or over Van Boucq renders obvious determining whether the user opted-in to or opted-out of location tracking based on the existence of a location tracker (cookie), or lack thereof.

Van Boucq further discloses that, upon determining that the user opted-out of geolocation, the system “result[s] in the creation of a cookie.” EX1009, ¶63. A POSITA would have understood that the “creation of a cookie” is typically accomplished by a server sending a cookie—which would contain a unique ID for the user—to the user’s device. EX1007, ¶¶276, 165. A POSITA also would have understood that cookies are typically stored in the local browser cache for the user. *Id.* To the extent that Patent Owner argues that Van Boucq only discloses storing third-party cookies, nothing in the claims or in the proposed constructions

precludes using a third-party cookie to store the unique identifier.

In any event, it would have also been obvious to a POSITA to use a first-party cookie or other tracking mechanism instead of a third-party cookie if third-party cookies were disabled, which Doughty recognizes could happen. *Id.*; EX1008, 17:24-27. Indeed, Doughty discloses “serv[ing]” a cookie *or other file (e.g., pixel tag)* to be stored on the user’s device. EX1008, 16:59-17:5. A POSITA would have understood that the cookies in Doughty could be first-party cookies and pixel tags, which are not third-party cookies. EX1008, 17:12-14 (“a pixel tag is usually a transparent graphic image ... placed on a webpage or in an email”); EX1007, ¶166. And again, a POSITA would have understood that cookies and similar files like pixel tags are stored in the user’s local browser cache with a unique ID for the user. EX1007, ¶166. In view of Doughty’s and Van Boucq’s teachings, a POSITA therefore would have found it obvious to send a cookie, or another file like a pixel tag, with a unique ID for storage in the local browser cache upon determining that the user opted-out of location tracking. *Id.*

Alternatively, it would have been obvious to a POSITA that the cookie or other file (e.g., pixel tag) taught by the combination of Doughty and Van Boucq should contain the unique ID for the user because doing so allows the system to identify the user by that unique ID later. EX1008, 16:59-17:27 (explaining that a pixel tag uses match keys to identify the user); EX1007, ¶167. A POSITA would

have understood that, without storing the unique ID as part of the cookie or other file, the system would not be able to later identify the user later. EX1007, ¶167.

D. Claim 4: “The method of claim 1, wherein the campaign comprises one or more messages or media that share a theme.”

Doughty alone and with Smith further disclose this limitation. Doughty discloses that brands may retarget users who are already engaged with the brand, leading to more successful advertisements. EX1008, 20:9-26. A POSITA would have understood, or it would have been obvious, that brands would have multiple messages or media that all promote the same product, service, or brand name such that the user sees different content each time she is retargeted. EX1007, ¶278. A POSITA would have recognized that, by providing multiple messages, the user’s exposure to different products, services, or options associated with the brand would increase and the user would be more likely to purchase, subscribe, or otherwise convert. Indeed, Doughty recognizes the need for multiple different messages or media when it discloses that studies “suggest that a company needs to have an average of seven *different* contacts with a customer before they make a purchase.” EX1008, 20:21-23.

Smith similarly recognizes that advertising campaigns are often associated with multiple different messages and medias, including TV, radio, internet, billboards, visible signs, and presentations. EX1032, 1:6-22. Smith also acknowledges that there may be multiple advertisements, across these different

advertising vectors, and is directed to attributing effectiveness to particular ads, some of which may correspond to physical locations. *Id.*, 1:37-54. Because Smith discloses differentiating between the effectiveness of different ads, a POSITA would have understood, or it would have been obvious, that each of these different messages and medias would share a common theme, such as promoting a particular product, service, or brand. EX1007, ¶279.

And, a POSITA would have understood that the advertising campaigns disclosed above are consistent with those described in connection with claim 1. *Id.*, ¶280.

E. Claim 5: “The method of claim 1, wherein the campaign is associated with a time period.”

Smith further discloses this limitation. For example, Smith discloses that the system may check for the effectiveness of an advertising campaign for a specific “time period,” for example, “Apr. 1, 2011 to Apr. 9, 2011.” EX1032, 13:59-64. A POSITA would have understood, or it would have been obvious, that limiting effectiveness to a particular time period associated with the campaign would enable one to better analyze the effectiveness of that campaign—e.g., the time period when a sale is valid, or the time period when a billboard is displayed. EX1007, ¶281.

Given this, a POSITA would have understood, or it would have been obvious, that the campaign is associated with a time period. *Id.*, ¶282.

F. Claim 6: “The method of claim 1, wherein the campaign level data comprises a number of impressions for each of a plurality of days during the campaign.”

Smith further discloses this limitation. As in 1[a], Doughty and Smith disclose receiving campaign level data associated with the user’s impressions (i.e., interactions with an advertising campaign). EX1007, ¶283. Furthermore, as in claim 5, Smith discloses tracking these impressions or interactions for a limited time period, such as the days that a campaign is active. *Id.*

Smith also discloses tracking “(1) visitors that visited the location/content a given number of times (e.g., five or more times, only one time, and so forth), [and] (2) visitors that visited the location/content a given number of times within a given period (e.g., two times in one day, five or more times in one week, one time per day during the times of 6 pm to 9 pm three consecutive days, and so forth).” EX1032, 13:43-49. A POSITA would have understood that tracking these statistics includes tracking the number of impressions for each of a plurality of days during the campaign. EX1007, ¶283.

And, a POSITA would have understood that the campaign level data disclosed above is consistent with the data described in connection with claim 1. *Id.*, ¶284.

G. Claim 7: “The method of claim 6, wherein the campaign level data comprises daypart blueprint data indicating aggregate daypart proportions of impressions for a plurality of campaigns.”

Smith further discloses this limitation. As in claim 6, Smith discloses tracking impressions or interactions with an ad over the time the campaign is active. Smith further discloses tracking those same statistics for certain parts of the day (e.g., “6 pm to 9 pm”), or “dayparts.” EX1032, 13:43-49. A POSITA would have understood, or it would have been obvious, that the day could be broken up into multiple dayparts and these statistics would be tracked for each one of those dayparts (“daypart blueprint data”). A POSITA would have also understood that these statistics would be tracked for all advertising campaigns, which would typically include more than one (“a plurality”). EX1007, ¶285-86.

And, a POSITA would have understood that the campaign level data disclosed above is consistent with the data described in connection with claim 6.

Id.

H. Claim 8: “The method of claim 7, wherein the daypart proportions are used to assign a daypart factor to each of a plurality of dayparts.”

Smith further discloses this limitation. As in claim 7, Smith discloses tracking impressions or interactions with an ad for multiple different parts of the day (e.g., “6 pm to 9 pm”). EX1032, 13:43-49. Smith further discloses factoring these daypart proportions into the effectiveness calculation, such as by weighting

those that visit a website “one time per day during the times of 6 pm to 9 pm three consecutive days.” *Id.* A POSITA would have understood that the weight assigned to the visits for certain dayparts is a daypart factor and that different weights could be assigned to different parts of the day. EX1007, ¶287. For example, a visit to a website on October 19, 2024 (Friday) at 6 pm may have a daypart factor that is higher than a visit to that same website the next morning (Saturday) at 8 am. *Id.*

I. Claim 9: “The method of claim 8, wherein the campaign level data comprises a date proportion and a daypart proportion associated with the browser session.”

Smith further discloses this limitation. As in claim 7, Smith discloses tracking impressions or interactions with an ad for multiple different dayparts. EX1007, ¶288. Furthermore, Smith discloses tracking the date of an impression or interaction as part of the campaign level data so that the system can tell if the impression or interaction occurred during “a time frame (e.g., during the time period of Apr. 1, 2011 to Apr. 9, 2011).” EX1032, 16:43-44. And, as in 1[b], the system of Doughty over Van Boucq and Smith tracks user visits per browser session. EX1007, ¶288.

J. Claim 10: “The method of claim 8, wherein the probability is determined using the date proportion associated with the browser session, the daypart proportion associated with the browser session, and the daypart factor associated with the daypart proportion.”

Smith further discloses this limitation. As in claims 7-9, the campaign level data disclosed in Smith includes a date, daypart, and daypart factor. EX1007, ¶289. As in 1[h], moreover, the system calculates the probability based upon a number of factors, including the time she visited the website. *Id.* A POSITA would have understood that the time the user visited the website would include the date, daypart, and daypart factor as disclosed in claims 7-9. *Id.*

As such, a POSITA would have understood that the probability based upon the time would have included each of these components. *Id.*, ¶290.

K. Claim 11: “The method of claim 10, wherein the probability is determined using the number of impressions for each of the plurality of days during the campaign.”

Smith further discloses this limitation. As in claim 6, a POSITA would have understood that the system tracks the number of impressions for each of a plurality of days during the campaign. EX1007, ¶291; EX1032, 16:37-50 (“e.g., during the time period of Apr. 1, 2011 to Apr. 9, 2011”). Furthermore, Doughty discloses the importance of “retargeting” and exposing the user to an advertising campaign more than a single time (i.e., “impression”). EX1008, 20:9-26.

Given these disclosures, it would have been obvious to a POSITA that the probability of a browser session being initiated in response to watching or listening the ad would go up when the user is “retargeted” or exposed to an ad more than once. EX1007, ¶292. As such, a POSITA would have known that the probability of a user-initiated browser session to view a website would go up with more impressions of an ad, particularly within a time period like those disclosed in Smith. *Id.* A POSITA would therefore have been motivated to adjust the probability calculations using the number of impressions for each of a plurality of days during the advertising campaign. *Id.*

L. Claim 12: “The method of claim 1, wherein the probability is determined based on a time delay between watching or listening to the media and initialization of the browser session.”

As in 1[h], Smith discloses or renders obvious a probability or weighting based on the elapsed time since the user saw a presentation or advertisement on her device—i.e., the time delay between watching media and the initialization of a browser session. EX1007, ¶293.

M. Claim 13: “The method of claim 12, wherein the time delay represents a non-linear relationship with the probability.”

A POSITA would have understood, or it would have been obvious, to apply a non-linear relationship between the probability and the time delay described for claim 12. A POSITA would have recognized that the longer the delay, the less likely the user initiated the browser session based upon viewing the ad.

Conversely, if the user immediately visits a website after viewing a billboard, the probability is very high that the visit was because of the ad. A POSITA would have understood that the probability curve is unlikely to be a linear relationship. EX1007, ¶294.

Alternatively, a POSITA would have understood that there are only two possibilities for this relationship: linear or non-linear. A POSITA would have been motivated to try both possibilities to see which more closely matched the relationship. *Id.*, ¶295.

N. Claim 14: “The method of claim 12, wherein a first time delay results in a first time decay factor being applied to determine the probability and a second time delay results in a second time decay factor being applied to determine the probability.”

As in claim 13, a POSITA would have understood, or it would have been obvious, that the probability would change based upon the time delay in a non-linear fashion. EX1007, ¶¶296-297. A POSITA would have therefore understood that, to calculate the probability, the system could use a weight (as disclosed by Smith) that is based upon the time delay—a time decay factor. And, a POSITA would have recognized, or it would have been obvious, that the time decay factor should change depending upon the time delay. In other words, the factor would be different for different time delays. *Id.* Indeed, a POSITA would have understood, or it would have been obvious, that different time decay factors would be used

based upon the time delay given that Smith discloses varying the probability based upon the time delay. *Id.*

O. Claim 15: “The method of claim 1, wherein the campaign uniquely identifies a set of ZIP codes covered by the campaign.”

As in 1[f], the system determines whether a user is located within a zip code covered by the campaign. A POSITA would have further understood that, to make this determination, the campaign must uniquely identify which zip codes it covers and that there may be more than one zip code covered by the campaign (e.g., two adjacent zip codes). EX1007, ¶298.

P. Claim 16: “The method of claim 1, wherein the intent to access the URL comprises accessing the URL via a search engine or an address bar.”

The additional limitation for this claim is obvious because a POSITA would have understood that there are a very limited number of ways for a person to initiate a browser session and that the primary two ways would be: (1) type the URL into the address bar or (2) type the URL into a search engine. EX1007, ¶299. A POSITA further would have understood that the search engine and address bar were combined in many browsers before 2021. *Id.*

Q. Claim 17: “The method of claim 1, further comprising determining whether a household performed a transaction associated with the campaign.”

Doughty discloses determining a “household” associated with the user based upon the location of the device. EX1008, 11:48-52. And, Doughty and Smith both

disclose tracking when users perform other transactions in addition to tracking impressions or interactions, as explained in claim 6. EX1008, 18:65-67 (“User transactions associated with a mobile communication facility may be recorded and stored within a separate database.”); EX1032, 14:2-14 (“Analytics data for each listed visit may include an identification of a corresponding type of activity,” including a “Purchase.”). As such, Doughty over Van Boucq and Smith renders obvious determining whether a particular household performed a transaction associated with the campaign. EX1007, ¶300.

R. Claim 18: “The method of claim 17, further comprising determining a success of the campaign based on whether the household performed a transaction associated with the campaign.”

As in claim 17, a POSITA would have understood that the system determines when a household performs a transaction. It would have been obvious to a POSITA that the determination of the success of the campaign would have been based upon these transactions by different households. EX1007, ¶301. For example, Doughty contemplates charging advertisers based upon whether users took specific actions (e.g., clicks, actions, engagements). EX1008, 22:45-61. And Smith discloses weighting certain transactions (e.g., purchases) differently from others (e.g., visits). EX1032, 17:50-60. Furthermore, Smith discloses using the weights from the different transactions to determine the success of the campaign, as detailed in 1[g]-1[h]. EX1007, ¶301.

S. Claim 19:

Claim 19 is the corresponding machine-readable storage device claim that mirrors the steps in claim 1. It is invalid for the same reasons as claim 1 set forth above:

Claim	Analysis
19[pre]: “A non-transitory, machine-readable storage device that includes instructions that, when executed by a computing device, cause the computing device to:”	A POSITA would have understood that the method described in the context of claim 1 would have been stored as on a non-transitory, machine-readable device with source code that performs the described method. <i>See</i> 1[pre]; EX1007, ¶302. Furthermore, Doughty discloses performing the method on computing devices. EX1008, Fig. 1, 10:15-25 (describing the server 104 that would contain non-transitory, machine-readable code for performing the method); EX1007, ¶302.
19[a]: “receive campaign level data associated with a campaign;”	1[a]. EX1007, ¶302.
19[b]: “receive anonymous data associated with a browser session initialized by a user via a browser on a user computing device;”	1[b]. <i>Id.</i>
19[c]: “determine that the user accessed a uniform resource locator (URL) during the browser session;”	1[c]. <i>Id.</i>
19[d]: “determine a latitude coordinate and a longitude coordinate of the user computing device, during the browser session, wherein the latitude coordinate and the longitude coordinate are determined based on the anonymous	1[d]. <i>Id.</i>

Claim	Analysis
data upon determining that the user opted-out of location tracking, and wherein the latitude coordinate and the longitude coordinate are determined based on geo-location data retrieved from the user computing device upon determining that the user opted-in to location tracking;”	
19[e]: “identify a physical address for the user based on the determined latitude coordinate and the determined longitude coordinate using a map application programming interface (API);”	1[e]. <i>Id.</i>
19[f]: “determine that the physical address is within a ZIP code covered by the campaign;”	1[f]. <i>Id.</i>
19[g]: “determine that the browser session was initiated with an intent to visit the URL; and”	1[g]. <i>Id.</i>
19[h]: “determine a probability that the browser session was initiated in response to watching or listening to media associated with the campaign using the campaign level data.”	1[h]. <i>Id.</i>

T. Claims 20-36:

These claims are invalid for the reasons set forth above:

Claim	Analysis
20	Claim 2. EX1007, ¶303.

Claim	Analysis
21	Claim 3. <i>Id.</i>
22	Claim 4. <i>Id.</i>
23	Claim 5. <i>Id.</i>
24	Claim 6. <i>Id.</i>
25	Claim 7. <i>Id.</i>
26	Claim 8. <i>Id.</i>
27	Claim 9. <i>Id.</i>
28	Claim 10. <i>Id.</i>
29	Claim 11. <i>Id.</i>
30	Claim 12. <i>Id.</i>
31	Claim 13. <i>Id.</i>
32	Claim 14. <i>Id.</i>
33	Claim 15. <i>Id.</i>
34	Claim 16. <i>Id.</i>
35	Claim 17. <i>Id.</i>
36	Claim 18. <i>Id.</i>

VII. GROUND 2 –DOUGHTY OVER VAN BOUCQ, SMITH, AND MAGINNIS

To the extent that Ground 1 does not render obvious 1[e], it would have been obvious to combine Doughty, Van Boucq, and Smith with Maginnis. The analysis for the remaining limitations is the same as Ground 1.

1. Maginnis

Maginnis is a U.S. Patent entitled “Estimating Foot Traffic Lift in Response to an Advertisement Campaign at an Online System.” EX1010. Maginnis was published December 22, 2016, and is therefore prior art to the ’947 patent by almost 5 years. Maginnis was not before the examiner during prosecution.

Like Doughty and Van Boucq, Maginnis is in the same general field as the ’947 patent: online advertisements. Specifically, Maginnis discloses a method for determining “the effectiveness of an advertisement campaign at an online system.” *Id.*, 1:38-39. According to Maginnis, the system will measure an increase in foot traffic in response to an online advertising campaign by tracking the location of users that saw an ad. *Id.*, 1:39-63. Just like Doughty, Maginnis explains that there is a “location module” that determines the location of a user’s device and then stores the location of the user in the user’s profile. *Id.*, 9:5-18. Maginnis further explains that the “location module” will convert “raw location data” (latitude and longitude coordinates) into “an address corresponding to a location” by “reverse geocoding.” *Id.*, 9:19-26. A POSITA would have

understood that, to access map data for reverse geocoding as disclosed in Maginnis, the system would use an API call to one of the known location services, like Apple, Google, or Microsoft. *See* EX1020; EX1021; EX1022; EX1023; EX1024; EX1025, 35; EX1007, ¶306.

In sum, Maginnis discloses determining the address corresponding to geographic coordinates by using an API call to map data.

2. Motivation to Combine Doughty, Van Boucq, and Smith with Maginnis

As in Ground 1, it would have been obvious to combine Doughty, Van Boucq, and Smith. It would have been further obvious to combine Doughty, Van Boucq, and Smith with Maginnis. As above, Doughty describes finding the user's location to help with targeted advertising, but does not expressly detail the well-known ways to determine the user's location. Van Boucq provides details about a number of different ways to determine the user's location, including depending upon whether the user opted-in to or out of location sharing. And Smith adds detail about determining the success of an advertisement using location. All three references contemplate receiving geographic coordinates (latitude and longitude coordinates), and Doughty discloses storing physical addresses of the user (e.g., home address and work address). EX1008, 6:55-7:10, 16:9-27; EX1007, ¶311.

Maginnis provides explicit disclosure of using reverse geocoding APIs to convert latitude and longitude coordinates to a physical address that would be

stored in the user's profile. EX1010, 9:19-26. A POSITA would have understood that implementing these well-known techniques that are disclosed in Maginnis to the combination of Doughty, Van Boucq, and Smith would have been obvious because it would have simply required applying a known technique to a known system ready for improvement to yield predictable results. EX1007, ¶¶307-311. In fact, Doughty encourages a POSITA to seek out modifications. EX1008, 26:44-51.

Because Doughty explains that it will associate physical addresses (e.g., home address, work address) with the user's profile, a POSITA would have been motivated to look for references, like Maginnis, in the same field of online advertising that provide further detail about how to convert geographic coordinates to physical addresses. A POSITA would have likewise found it obvious to implement the reverse geocoding method described in Maginnis because map APIs with reverse geocoding API calls were well-known years before the alleged invention. *See* EX1020; EX1021; EX1022; EX1023; EX1024; EX1025, 35; EX1007, ¶¶311-312. And it would have been straightforward for a POSITA to simply make an API call to one of these well-known location services to get the physical address. *Id.* Indeed, Van Boucq even contemplates using these location services from companies like Google, Apple, and Microsoft. EX1009, ¶¶31-36; *Id.* And, given the reverse geocoding discussion in Maginnis, it would have been

obvious to a POSITA to use a reverse geocoding API call to these location services to get the physical address from the latitude/longitude. *Id.*

Furthermore, a POSITA would have had a reasonable expectation of success because these location services with reverse geocoding API calls were ubiquitous and known to work. *Id.* And, because Doughty contemplates receiving geographic coordinates and storing physical addresses, a POSITA would have been motivated to perform the required translation using these API calls that were known to be used for that exact purpose in view of the express disclosure in Maginnis in the same field. *Id.*

3. 1[e]:

As in Ground 1, Doughty over Van Boucq and Smith renders obvious 1[e]. 1[e] also is rendered obvious by Doughty over Van Boucq, Smith, and Maginnis. As detailed above, Maginnis describes a “location module” that determines and stores the location of the user, just as is described in Doughty. EX1010, 9:5-18. Maginnis further explains that the “location module” converts “raw location data” (latitude and longitude coordinates) into “an address corresponding to a location” by “access[ing] map data to identify, by reverse geocoding.” *Id.*, 9:19-26. It would have been obvious to a POSITA that, to access map data for reverse geocoding, the Doughty over Van Boucq system would use a reverse geocoding API call as described in Maginnis. EX1007, ¶313. The motivation to combine is

provided in the previous section.

Furthermore, as explained by Van Boucq, many known location services included mapping software, such as location services from Apple, Google, and Microsoft. EX1009, ¶¶31-36. A POSITA would have known that these location services had APIs that could be called for various purposes, including reverse geocoding APIs to translate latitude and longitude coordinates into addresses. A POSITA therefore would have been motivated to use those reverse geocoding API calls (from Maginnis) already provided by the location services disclosed in Van Boucq. EX1007, ¶¶313-315.

Consequently, Doughty over Van Boucq and Maginnis renders obvious using a reverse geocoding API call to identify a physical address based upon the raw location data (latitude and longitude). *Id.*

VIII. THERE ARE NO SECONDARY CONSIDERATIONS

Petitioner is not aware of any relevant secondary considerations, but reserves the right to respond to any raised by Patent Owner.

IX. THIS PETITION SHOULD NOT BE REJECTED ON DISCRETIONARY GROUNDS

A. §325(d)

Petitioner submits that this petition should not be denied pursuant to §325(d). None of the references were before the examiner during prosecution.

B. *Fintiv* factors

Petitioner respectfully submits that, consistent with the Board’s precedential decision in *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 (P.T.A.B. Mar. 20, 2020), and the Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation (June 21, 2022) (“Interim *Fintiv* Procedure”), this Petition should not be denied pursuant to the Board’s discretionary authority. While there is a parallel district court action involving the Challenged Claims, discretionary denial would not be appropriate at least because of (i) Petitioner’s stipulation; (ii) the compelling evidence of unpatentability, which is separately and independently dispositive on the question of discretionary denial; and (iii) the lack of a trial date and relatively nascent stage in the parallel district court proceedings.

C. Whether the Court Granted a Stay or Evidence Exists That One May Be Granted If a Proceeding Is Instituted

The ’219 patent is asserted in a parallel district court proceeding: *Fullthrottle Technologies, LLC v. Rocket Media, LLC (d/b/a Launch Labs)*, No. 1:24-cv-00314 (M.D.N.C.) (“the Parallel Proceeding”) (*see* EX1026 (Complaint)). If this proceeding is instituted, a stay is likely to be granted. This factor weighs against discretionary denial.

D. Proximity of the Court’s Trial Date to the Board’s Projected Statutory Deadline for a Final Written Decision

If instituted, the Statutory Deadline for a Final Written Decision relating to this Petition is likely to be roughly 18 months from the date that it was filed—i.e., around May 2026. By contrast, no trial date has been set in the Parallel Proceeding, and according to the most recently available statistics from June 2024, the average time-to-trial for civil cases in the Middle District of North Carolina is 30.5 months. EX1027. That means that a trial would likely be held around November 2026—six months after the statutory deadline that would apply to these proceedings. This factor therefore weighs strongly against discretionary denial.

E. Investment in the Parallel Proceeding by the Court and the Parties

As the filing, Petitioner’s motion to dismiss is pending. The parties have not engaged in any discovery and no schedule has been entered. EX1028. This factor weighs strongly against discretionary denial.

F. Overlap Between Issues Raised in the Petition and in the Parallel Proceeding and Whether the Petitioner and the Defendant in the Parallel Proceeding Are the Same Party

The Challenged Claims and the prior art cited in this Petition overlap with those in the Parallel Proceeding and Petitioner is the Defendant in the Parallel Proceeding. Petitioner, however, hereby stipulates that, if an IPR is instituted on the grounds set forth in this Petition, it will not pursue in the Parallel Proceedings the specific grounds asserted in the Petition against the Challenged Claims. This

ground therefore weighs against discretionary denial. *Sands Revolution II, LLC v. Cont'l Intermodal Grp.*, IPR2019-01393, Paper 24, 7 (PTAB June 16, 2020). This factor is further supported by the other factors, such as the strength of the challenge. *See, e.g.*, Interim *Fintiv* Procedure at 4 (“[C]ompelling, meritorious challenges will be allowed to proceed at the PTAB even where district court litigation is proceeding in parallel.”).

G. Other Circumstances That Impact the Board's Exercise of Discretion, Including the Merits

This is a critical *Fintiv* factor, because “where the PTAB determines that the information presented at the institution stage presents a compelling unpatentability challenge, that determination alone demonstrates that the PTAB should not discretionarily deny institution under *Fintiv*.” Interim *Fintiv* Procedure, 4-5. This Petition presents a compelling unpatentability challenge for all the reasons discussed above.

X. MANDATORY NOTICES UNDER 37 C.F.R. §42.8(a)(1)

A. 37 C.F.R. §42.8(b)(1): Real Parties-In-Interest

Petitioner is the real party-in-interest.

B. 37 C.F.R. §42.8(b)(2): Related Matters

The '219 patent is asserted against Petitioner in *Fullthrottle Technologies, LLC v. Rocket Media, LLC (d/b/a Launch Labs)*, No. 1:24-cv-00314 (M.D.N.C.).

C. 37 C.F.R. §42.8(b)(3)-(4): Lead And Back-Up Counsel And Service Information

Designated Counsel for Petitioner and service information is below:

Lead Counsel	Back-Up Counsel
Ryan Iwahashi (Reg. # 63,378) GISH PLLC 50 California Street, Suite 1500 San Francisco, CA 94111 Telephone: (415) 630-8960 ryan@gishpllc.com	Andrew D. Gish (Reg. # 67,562) GISH PLLC 41 Madison Avenue New York, New York 10010 Telephone: (212) 518-7380 andrew@gishpllc.com

Petitioner consents to service by email at the addresses above.

XI. FEES UNDER 37 C.F.R. §42.103

Petition and Post-Institution fees totaling \$59,500 have been paid by electronic funds transfer.

XII. CONCLUSION

Petitioner requests the Board institute IPR of the Challenged Claims and cancel them.

Respectfully Submitted,

Dated: November 12, 2024

/s/Ryan Iwahashi

Ryan Iwahashi (Reg. #63,378)

ATTORNEY FOR PETITIONER

CERTIFICATE OF WORD COUNT UNDER 37 C.F.R. §42.24(a)

I, the undersigned, do hereby certify that the attached petition contains 13,996 words, as measured by the Word Count function of Microsoft Word. This is less than the limit of 14,000 words as specified by 37 C.F.R. §42.24(a)(i).

Dated: November 12, 2024

/s/ Ryan Iwahashi

Ryan Iwahashi (Reg. # 63,378)

ATTORNEY FOR PETITIONER

CERTIFICATION OF SERVICE

The undersigned certifies service pursuant to 37 C.F.R. §§42.6(e) and 42.105 on the Patent Owner of a copy of this Petition for *Inter Partes* Review and supporting materials via FedEx at the following correspondence address of record:

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Dated: November 12, 2024

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