

EX1002

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**In re Application of:****FullThrottle Technologies, LLC****Application No.: 17/687,992****Filing Date: March 7, 2022****For: LOCATION DETERMINATION USING ANONYMOUS BROWSER DATA****Confirmation No.: 3742****Group Art Unit: 3683****Examiner: MUSTAFA IQBAL****VIA EFS****REQUEST FOR ENTITY STATUS CHANGE**

Through this communication, Applicant hereby requests under 37 CFR 1.28(c) that the entity status for this application be updated from Small Entity to Regular Undiscounted. It has come to our attention that Applicant - FullThrottle Technologies, LLC - may have an implied license with a large entity for this patent asset. Out of an abundance of caution, and in compliance with 37 CFR 1.28(c), Applicant is back paying the difference between the small entity amount and the large entity amount in all previously paid USPTO fees as identified by the below table. The Commissioner is hereby authorized to withdraw the total deficiency owed amount below from Deposit Account No. 50-3541.

Fee	Small Entity Paid	Large Entity	Difference Due
Examination Fee	\$400	\$800	\$400
Filing Fee	\$80	\$320	\$240
Search Fee	\$350	\$700	\$350
Request for Prioritized Exam	\$2,100	\$4,200	\$2,100
Non-Provisional Processing Fee	\$70	\$140	\$70
Late Oath/Declaration Fee	\$80	\$160	\$80
Issue Fee	\$600	\$1,200	\$600
Total Deficiency Owed	N/A	N/A	\$3,840

DOCKET NO.: FLTH_0002

PATENT

Date: April 10, 2024

/Ryan A. Peddle/

Ryan A. Peddle

Registration No. 77,970

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ELECTRONIC ACKNOWLEDGEMENT RECEIPT

APPLICATION #
17/687,992

RECEIPT DATE / TIME
04/10/2024 01:55:58 PM Z ET

ATTORNEY DOCKET #
FLTH_0002

Title of Invention

LOCATION DETERMINATION USING ANONYMOUS BROWSER DATA

Application Information

APPLICATION TYPE Utility - Nonprovisional Application
under 35 USC 111(a)

PATENT # 11556947

CONFIRMATION # 3742

FILED BY Emily Tuite

PATENT CENTER # 65034891

FILING DATE 03/07/2022

CUSTOMER # 54380

FIRST NAMED INVENTOR Amol Waishampayan

CORRESPONDENCE ADDRESS -

AUTHORIZED BY Ryan Peddle

Documents

TOTAL DOCUMENTS: 1

DOCUMENT	PAGES	DESCRIPTION	SIZE (KB)
FLTH_0002_Request_for_Entity_Status_Change.pdf	2	Miscellaneous Incoming Letter	86 KB

Digest

DOCUMENT	MESSAGE DIGEST(SHA-512)
FLTH_0002_Request_for_Entity_Status_Change.pdf	F6ED6E842B859BF12B03CAE47F691420B904FC7A42FB2FE91 FA13371DED9B98C0C06666D28A2741844FD44672D10257C400 626B49092FA89B5A491707C8A0656

by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.



APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
17/687,992	01/17/2023	11556947	FLTH_0002	3742

54380 7590 12/28/2022
FLASTER/GREENBERG P.C.
1717 Arch Street
Suite 3300
Philadelphia, PA 19103

ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment is 0 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Application Assistance Unit (AAU) of the Office of Patents Stakeholder Experience (OPSE), Stakeholder Support Division (SSD) at (571)-272-4200.

INVENTOR(s) (Please see PAIR WEB site <http://pair.uspto.gov> for additional inventors):

Amol Waishampayan, Philadelphia, PA;
Pat O'Flaherty, Dublin, IRELAND;
Alexey Yakovlev, Dnipro, UKRAINE;

APPLICANT(s) (Please see PAIR WEB site <http://pair.uspto.gov> for additional applicants):

FullThrottle Technologies, LLC, Malvern, PA

The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation, and commercialization of new technologies. The USA offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to encourage and facilitate business investment. To learn more about why the USA is the best country in the world to develop technology, manufacture products, and grow your business, visit SelectUSA.gov.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
17/687,992	03/07/2022	Amol Waishampayan	FLTH_0002	3742
54380	7590	12/16/2022	EXAMINER	
FLASTER/GREENBERG P.C.			IQBAL, MUSTAFA	
1717 Arch Street				
Suite 3300				
Philadelphia, PA 19103				
			ART UNIT	PAPER NUMBER
			3683	
			NOTIFICATION DATE	DELIVERY MODE
			12/16/2022	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

USP@flastergreenberg.com

DOCKET NO.: FLTH_0002
Application No.: 17/687,992
Notice of Allowance Dated: October 20, 2022

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:
FullThrottle Technologies, LLC

Confirmation No.: 3742

Application No.: 17/687,992

Group Art Unit: 3683

Filing Date: March 7, 2022

Examiner: IQBAL, MUSTAFA

For: LOCATION DETERMINATION USING ANONYMOUS BROWSER DATA

Mail Stop Issue Fee
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Director:

AMENDMENT AFTER ALLOWANCE PURSUANT TO 37 CFR § 1.312

In response to the Notice of Allowance dated **October 20, 2022**, reconsideration is respectfully requested in view of the amendments and/or remarks as indicated below:

- ☐ **Amendments to the Specification** begin on page N/A of this paper.
- ☒ **Amendments to the Claims** are reflected in the listing of the claims which begins on page 2 of this paper.
- ☐ **Amendments to the Drawings** begin on page N/A of this paper and include an attached replacement sheet.
- ☒ **Remarks** begin on page 8 of this paper.
- ☒ The Commissioner is hereby authorized to charge any fee deficiency, charge any additional fees, or credit any overpayment of fees, associated with this application in connection with this filing, or any future filing, submitted to the U.S. Patent and Trademark Office during the pendency of this application, to Deposit Account No. 09-0435.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
17/687,992	03/07/2022	Amol Waishampayan	FLTH_0002

CONFIRMATION NO. 3742

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1717 Arch Street
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PUBLICATION NOTICE



OC000000136999419

Title:LOCATION DETERMINATION USING ANONYMOUS BROWSER DATA

Publication No.US-2022-0391933-A1

Publication Date:12/08/2022

NOTICE OF PUBLICATION OF APPLICATION

The above-identified application will be electronically published as a patent application publication pursuant to 37 CFR 1.211, et seq. The patent application publication number and publication date are set forth above.

The publication may be accessed through the USPTO's publically available Searchable Databases via the Internet at www.uspto.gov. The direct link to access the publication is currently <http://www.uspto.gov/patft/>.

The publication process established by the Office does not provide for mailing a copy of the publication to applicant. A copy of the publication may be obtained from the Office upon payment of the appropriate fee set forth in 37 CFR 1.19(a)(1). Orders for copies of patent application publications are handled by the USPTO's Public Records Division. The Public Records Division can be reached by telephone at (571) 272-3150 or (800) 972-6382, by facsimile at (571) 273-3250, by mail addressed to the United States Patent and Trademark Office, Public Records Division, Alexandria, VA 22313-1450 or via the Internet.

In addition, information on the status of the application, including the mailing date of Office actions and the dates of receipt of correspondence filed in the Office, may also be accessed via the Internet through the Patent Electronic Business Center at www.uspto.gov using the public side of the Patent Application Information and Retrieval (PAIR) system. The direct link to access this status information is currently <https://portal.uspto.gov/pair/PublicPair>. Prior to publication, such status information is confidential and may only be obtained by applicant using the private side of PAIR.

Further assistance in electronically accessing the publication, or about PAIR, is available by calling the Patent Electronic Business Center at 1-866-217-9197.

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

DOCKET NO.: FLTH_0002
Application No.: 17/687,992
Notice of Allowance Dated: October 20, 2022

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:
FullThrottle Technologies, LLC

Confirmation No.: 3742

Application No.: 17/687,992

Group Art Unit: 3683

Filing Date: March 7, 2022

Examiner: IQBAL, MUSTAFA

For: LOCATION DETERMINATION USING ANONYMOUS BROWSER DATA

Mail Stop Issue Fee
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Director:

AMENDMENT AFTER ALLOWANCE PURSUANT TO 37 CFR § 1.312

In response to the Notice of Allowance dated **October 20, 2022**, reconsideration is respectfully requested in view of the amendments and/or remarks as indicated below:

- ☐ **Amendments to the Specification** begin on page N/A of this paper.
- ☒ **Amendments to the Claims** are reflected in the listing of the claims which begins on page 2 of this paper.
- ☐ **Amendments to the Drawings** begin on page N/A of this paper and include an attached replacement sheet.
- ☒ **Remarks** begin on page 8 of this paper.
- ☒ The Commissioner is hereby authorized to charge any fee deficiency, charge any additional fees, or credit any overpayment of fees, associated with this application in connection with this filing, or any future filing, submitted to the U.S. Patent and Trademark Office during the pendency of this application, to Deposit Account No. 09-0435.

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

What is claimed is:

1. (Currently Amended) A method comprising:
 - receiving first anonymous data associated with a first browser session initialized by a user via a browser on a user computing device, wherein the first anonymous data comprises one or more of a time, a date, one or more uniform resource locators (URLs), a referring URL, a browser type, a language, an internet protocol (IP) address, or location data;
 - determining that the user accessed a URL during the first browser session;
 - determining that the user has not been assigned a unique identifier based on a lack of stored location data for the user computing device;
 - assigning the unique identifier to the user;
 - 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;
 - 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;
 - determining a latitude coordinate and a longitude coordinate of the user computing device, during the first browser session, wherein the latitude coordinate and the longitude coordinate are determined based on the first 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);
 - associating the unique identifier to the physical address;

generating a user profile for the user using the unique identifier and physical address, the user profile comprising profile information that comprises one or more URLs the user has accessed, ~~[[the]]~~ a frequency with which the user accessed the URL(s), demographics associated with the user, the physical address(es) associated with the user, or ~~[[the]]~~ devices associated with the user;

updating the profile information based on second anonymous data associated with a second browser session initialized on the user computing device or another user computing device associated with the physical address;

identifying a second visit to the URL during the second browser session using the unique identifier stored in the local browser cache;

determining, using the updated profile information, a confidence rating for the user, the confidence rating indicating a quantifiable measure of the user's interest in a product;

generating one or more notifications based on one or more of the updated profile information or the confidence rating; and

determining when to send the one or more notifications to the user.

2. (Previously Presented) The method of claim 1, wherein the physical address is a first physical address, the method further comprising:

determining a second physical address for the user computing device while accessing the URL during the second browser session based on the second anonymous data; and

associating the second physical address to the user profile based on the unique identifier stored in the local browser cache.

3. (Original) The method of claim 1, further comprising, installing, upon determining that the user opted-in to location tracking, the location tracker in the browser.

4. (Currently Amended) The method of claim 1, further comprising determining personal information associated with the user, the personal information comprising one or more of an

address type, a name of the user, an age of the user, a gender of the user, the demographics associated with the user, or psychographics associated with the user, wherein the personal information is used to generate the user profile and determine the confidence rating.

5. (Original) The method of claim 4, wherein the address type comprises one or more of a residential address, a single family home, an apartment building, or a commercial address, wherein when the address type is a residential address, the user profile is associated with the residential address such that information associated with the residential address is used to generate the user profile.

6. (Original) The method of claim 1, wherein the one or more notifications comprise one or more of an email, a text message, a mobile phone notification, a phone call, or a digital display.

7. (Original) The method of claim 1, further comprising:
determining a specific product of interest based on the URLs that the user visited; and
generating the one or more notifications based on the specific product of interest.

8. (Currently Amended) The method of claim 1, further comprising updating the determined confidence rating upon subsequent visits to the ~~specific~~ URL to indicate an increase in the user's interest in the product.

9. (Currently Amended) The method of claim 1, wherein the first anonymous data comprises the latitude coordinate and the longitude coordinate.

10. (Original) The method of claim 1, wherein the location tracker is stored in a folder associated with the browser.

11. (Currently Amended) A non-transitory, machine-readable storage device that includes instructions that, when executed by a computing device, cause the computing device to:

- receive first anonymous data associated with a first browser session initialized by a user via a browser on a user computing device, wherein the first anonymous data comprises one or more of a time, a date, one or more uniform resource locators (URLs), a referring URL, a browser type, a language, an internet protocol (IP) address, or location data;
- determine that the user accessed a URL during the first browser session;
- determine that the user has not been assigned a unique identifier based on a lack of stored location data for the user computing device;
- assign the unique identifier to the user;
- determine whether the user opted-in to or out of location tracking, based on whether a location tracker is installed on the user computing device;
- send, 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;
- determine a latitude coordinate and a longitude coordinate of the user computing device, during the first browser session, wherein the latitude coordinate and the longitude coordinate are determined based on the first 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;
- 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);
- associate the unique identifier to the physical address;
- generate a user profile for the user using the unique identifier and physical address, the user profile comprising profile information that comprises one or more URLs the user has accessed, [[the]] a frequency with which the user accessed the URL(s), demographics associated with the user, the physical address(es) associated with the user, or [[the]] devices associated with the user;

update the profile information based on second anonymous data associated with a second browser session initialized on the user computing device or another user computing device associated with the physical address;

identify a second visit to the URL during the second browser session using the unique identifier stored in the local browser cache;

determine, using the updated profile information, a confidence rating for the user, the confidence rating indicating a quantifiable measure of the user's interest in a product;

generate one or more notifications based on one or more of the updated profile information or the confidence rating; and

determine when to send the one or more notifications to the user.

12. (Previously Presented) The non-transitory, machine-readable storage device of claim 11, wherein the physical address is a first physical address, and wherein the instructions, when executed by the computing device, cause the computing device to:

determine a second physical address for [[that]] the user computing device while accessing the URL during the second browser session based on the second anonymous data; and

associating the second physical address to the user profile based on the unique identifier stored in the local browser cache.

13. (Original) The non-transitory, machine-readable storage device of claim 11, wherein the instructions, when executed by the computing device, cause the computing device to install, upon determining that the user opted-in to location tracking, the location tracker in the browser.

14. (Currently Amended) The non-transitory, machine-readable storage device of claim 11, wherein the instructions, when executed by the computing device, cause the computing device to determine personal information associated with the user, the personal information comprising one or more of an address type, a name of the user, an age of the user, a gender of the user, the

demographics associated with the user, or psychographics associated with the user, wherein the personal information is used to generate the user profile and determine the confidence rating.

15. (Original) The non-transitory, machine-readable storage device of claim 14, wherein the address type comprises one or more of a residential address, a single family home, an apartment building, or a commercial address, wherein when the address type is a residential address, the user profile is associated with the residential address such that information associated with the residential address is used to generate the user profile.

16. (Original) The non-transitory, machine-readable storage device of claim 11, wherein the one or more notifications comprise one or more of an email, a text message, a mobile phone notification, a phone call, or a digital display.

17. (Original) The non-transitory, machine-readable storage device of claim 11, wherein the instructions, when executed by the computing device, cause the computing device to:
determine a specific product of interest based on the URLs that the user visited; and
generate the one or more notifications based on the specific product of interest.

18. (Currently Amended) The non-transitory, machine-readable storage device of claim 11, wherein the instructions, when executed by the computing device, cause the computing device to update the determined confidence rating upon subsequent visits to the ~~specific~~ URL to indicate an increase in the user's interest in the product.

19. (Currently Amended) The non-transitory, machine-readable storage device of claim 11, wherein the first anonymous data comprises the latitude coordinate and the longitude coordinate.

20. (Original) The non-transitory, machine-readable storage device of claim 11, wherein the location tracker is stored in a folder associated with the browser.

DOCKET NO.: FLTH_0002
Application No.: 17/687,992
Notice of Allowance Dated: October 20, 2022

PATENT

REMARKS

Claims 1-20 are pending and indicated as being allowed. Claim 1, 4, 8, 9, 11, 14, 18, and 19 are amended herein to address informalities. No claims are presently being added or canceled. No new matter has been added.

Applicant respectfully submits that the foregoing amendments require no substantial amount of additional work on the part of the U.S. Patent and Trademark Office. Accordingly, Applicant respectfully requests entry of the foregoing amendment and issuance of the instant application.

Date: November 8, 2022

/Ryan A. Peddle/

Ryan A. Peddle

Registration No. 77,970

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Telephone: (215) 279-9393
Facsimile: (215) 279-9394

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), by mail or fax, or via EFS-Web.

By mail, send to: Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

By fax, send to: (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

54380 7590 10/20/2022
FLASTER/GREENBERG P.C.
1717 Arch Street
Suite 3300
Philadelphia, PA 19103

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being transmitted to the USPTO via EFS-Web or by facsimile to (571) 273-2885, on the date below.

(Typed or printed name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
17/687,992	03/07/2022	Amol Waishampayan	FLTH_0002	3742

TITLE OF INVENTION: LOCATION DETERMINATION USING ANONYMOUS BROWSER DATA

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	\$600	\$0.00	\$0.00	\$600	01/20/2023

EXAMINER	ART UNIT	CLASS-SUBCLASS
IQBAL, MUSTAFA	3683	705-007340

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

☐ Change of correspondence address (or Change of Correspondence Address form PTO/AIA/122 or PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/AIA/47 or PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

(1) The names of up to 3 registered patent attorneys or agents OR, alternatively,

(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 Flaster Greenberg, P.C.

2

3

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document must have been previously recorded, or filed for recordation, as set forth in 37 CFR 3.11 and 37 CFR 3.81(a). Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

FullThrottle Technologies, LLC

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Malvern, PA

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☒ Corporation or other private group entity ☐ Government

4a. Fees submitted: ☒ Issue Fee ☐ Publication Fee (if required) ☐ Advance Order - # of Copies

4b. Method of Payment: (Please first reapply any previously paid fee shown above)

☒ Electronic Payment via EFS-Web ☐ Enclosed check ☐ Non-electronic payment by credit card (Attach form PTO-2038)

☒ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment to Deposit Account No. 50-3541

5. Change in Entity Status (from status indicated above)

☐ Applicant certifying micro entity status. See 37 CFR 1.29

☐ Applicant asserting small entity status. See 37 CFR 1.27

☐ Applicant changing to regular undiscounted fee status.

NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.

NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.

NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature /Ryan A. Peddle /

Date November 8, 2022

Typed or printed name Ryan A. Peddle

Registration No. 77,970

Electronic Patent Application Fee Transmittal				
Application Number:		17687992		
Filing Date:		07-Mar-2022		
Title of Invention:		LOCATION DETERMINATION USING ANONYMOUS BROWSER DATA		
First Named Inventor/Applicant Name:		Amol Waishampayan		
Filer:		Ryan A. Peddle/Diana Cook		
Attorney Docket Number:		FLTH_0002		
Filed as Small Entity				
Filing Fees for Utility under 35 USC 111(a)				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
UTILITY APPL ISSUE FEE	2501	1	600	600

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension-of-Time:				
Miscellaneous:				
Total in USD (\$)				600

Electronic Acknowledgement Receipt

EFS ID:	46984884
Application Number:	17687992
International Application Number:	
Confirmation Number:	3742
Title of Invention:	LOCATION DETERMINATION USING ANONYMOUS BROWSER DATA
First Named Inventor/Applicant Name:	Amol Waishampayan
Customer Number:	54380
Filer:	Ryan A. Peddle/Diana Cook
Filer Authorized By:	Ryan A. Peddle
Attorney Docket Number:	FLTH_0002
Receipt Date:	08-NOV-2022
Filing Date:	07-MAR-2022
Time Stamp:	16:27:34
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	\$600
RAM confirmation Number	E2022A8G28011976
Deposit Account	
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		FLTH_0002_312_Amendment_after_Allowance.pdf	125566	yes	8
			e6712552777a2d654d4525a79eb0776630ca21d6		
	Multipart Description/PDF files in .zip description				
	Document Description		Start	End	
	Amendment after Notice of Allowance (Rule 312)		1	1	
	Claims		2	7	
	Applicant Arguments/Remarks Made in an Amendment		8	8	
Warnings:					
Information:					
2	Issue Fee Payment (PTO-85B)	03_FLTH_Issue_Fee_Transmittal.pdf	123061	no	1
			3b5372728d11ae8902595886164b7c6710ae033a6		
Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	37896	no	2
			90271f78ade8b5679b2a1b1cd44f9df6ee0144bc		
Warnings:					
Information:					
Total Files Size (in bytes):			286523		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

54380 7590 10/20/2022
FLASTER/GREENBERG P.C.
1717 Arch Street
Suite 3300
Philadelphia, PA 19103

EXAMINER	
IQBAL, MUSTAFA	
ART UNIT	PAPER NUMBER
3683	

DATE MAILED: 10/20/2022

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
17/687,992	03/07/2022	Amol Waishampayan	FLTH_0002	3742

TITLE OF INVENTION: LOCATION DETERMINATION USING ANONYMOUS BROWSER DATA

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	\$600	\$0.00	\$0.00	\$600	01/20/2023

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the ENTITY STATUS shown above. If the ENTITY STATUS is shown as SMALL or MICRO, verify whether entitlement to that entity status still applies.

If the ENTITY STATUS is the same as shown above, pay the TOTAL FEE(S) DUE shown above.

If the ENTITY STATUS is changed from that shown above, on PART B - FEE(S) TRANSMITTAL, complete section number 5 titled "Change in Entity Status (from status indicated above)".

For purposes of this notice, small entity fees are 1/2 the amount of undiscounted fees, and micro entity fees are 1/2 the amount of small entity fees.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Maintenance fees are due in utility patents issuing on applications filed on or after Dec. 12, 1980. It is patentee's responsibility to ensure timely payment of maintenance fees when due. More information is available at www.uspto.gov/PatentMaintenanceFees.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), by mail or fax, or via EFS-Web.

By mail, send to: Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

By fax, send to: (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

54380 7590 10/20/2022
FLASTER/GREENBERG P.C.
1717 Arch Street
Suite 3300
Philadelphia, PA 19103

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being transmitted to the USPTO via EFS-Web or by facsimile to (571) 273-2885, on the date below.

	(Typed or printed name)
	(Signature)
	(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
17/687,992	03/07/2022	Amol Waishampayan	FLTH_0002	3742

TITLE OF INVENTION: LOCATION DETERMINATION USING ANONYMOUS BROWSER DATA

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	\$600	\$0.00	\$0.00	\$600	01/20/2023

EXAMINER	ART UNIT	CLASS-SUBCLASS
IQBAL, MUSTAFA	3683	705-007340

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

☐ Change of correspondence address (or Change of Correspondence Address form PTO/AIA/122 or PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/AIA/47 or PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

(1) The names of up to 3 registered patent attorneys or agents OR, alternatively,

1 _____

(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

2 _____

3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document must have been previously recorded, or filed for recordation, as set forth in 37 CFR 3.11 and 37 CFR 3.81(a). Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. Fees submitted: ☐ Issue Fee ☐ Publication Fee (if required) ☐ Advance Order - # of Copies _____

4b. Method of Payment: (Please first reapply any previously paid fee shown above)

☐ Electronic Payment via EFS-Web ☐ Enclosed check ☐ Non-electronic payment by credit card (Attach form PTO-2038)

☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment to Deposit Account No. _____

5. Change in Entity Status (from status indicated above)

☐ Applicant certifying micro entity status. See 37 CFR 1.29

☐ Applicant asserting small entity status. See 37 CFR 1.27

☐ Applicant changing to regular undiscounted fee status.

NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.

NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.

NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature _____

Date _____

Typed or printed name _____

Registration No. _____



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
17/687,992	03/07/2022	Amol Waishampayan	FLTH_0002	3742
54380	7590	10/20/2022	EXAMINER	
FLASTER/GREENBERG P.C.			IQBAL, MUSTAFA	
1717 Arch Street			ART UNIT	
Suite 3300			PAPER NUMBER	
Philadelphia, PA 19103			3683	
DATE MAILED: 10/20/2022				

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (Applications filed on or after May 29, 2000)

The Office has discontinued providing a Patent Term Adjustment (PTA) calculation with the Notice of Allowance.

Section 1(h)(2) of the AIA Technical Corrections Act amended 35 U.S.C. 154(b)(3)(B)(i) to eliminate the requirement that the Office provide a patent term adjustment determination with the notice of allowance. See Revisions to Patent Term Adjustment, 78 Fed. Reg. 19416, 19417 (Apr. 1, 2013). Therefore, the Office is no longer providing an initial patent term adjustment determination with the notice of allowance. The Office will continue to provide a patent term adjustment determination with the Issue Notification Letter that is mailed to applicant approximately three weeks prior to the issue date of the patent, and will include the patent term adjustment on the patent. Any request for reconsideration of the patent term adjustment determination (or reinstatement of patent term adjustment) should follow the process outlined in 37 CFR 1.705.

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

OMB Clearance and PRA Burden Statement for PTOL-85 Part B

The Paperwork Reduction Act (PRA) of 1995 requires Federal agencies to obtain Office of Management and Budget approval before requesting most types of information from the public. When OMB approves an agency request to collect information from the public, OMB (i) provides a valid OMB Control Number and expiration date for the agency to display on the instrument that will be used to collect the information and (ii) requires the agency to inform the public about the OMB Control Number's legal significance in accordance with 5 CFR 1320.5(b).

The information collected by PTOL-85 Part B is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Notice of Allowability	Application No. 17/687,992	Applicant(s) Waishampayan et al.	
	Examiner MUSTAFA IQBAL	Art Unit 3683	AIA (FITF) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 9/13/2022.
☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on ____.

2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.

3. ☒ The allowed claim(s) is/are 1-20. As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a) ☐ All b) ☐ Some* c) ☐ None of the:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. ____.

3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)	5. ☐ Examiner's Amendment/Comment
2. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date ____.	6. ☒ Examiner's Statement of Reasons for Allowance
3. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material ____.	7. ☐ Other ____.
4. ☐ Interview Summary (PTO-413), Paper No./Mail Date. ____.	

/MUSTAFA IQBAL/ Examiner, Art Unit 3683	
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Allowability Notice

Notice of Pre-AIA or AIA Status

- The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

Acknowledgments

- Claims 1-20 are allowable per the reasons for allowance below.

Reasons for Allowance

- The following is an examiner's statement of reasons for allowance. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

35 USC 101

The claims are patent eligible as they meet the Alice test for eligibility under 35 USC §101 and the 2019 PEG as the claims recite limitations which are not abstract under Prong 2 of step 2A of the Alice analysis as the claimed invention uses the judicial exception in some other meaningful way beyond generally linking the use of the judicial exception to a particular technological environment, such that the claim as a whole is more than a drafting effort designed to monopolize the exception - see MPEP 2106.05(e) and Vanda Memo

For example, the claimed invention recites limitations such as

A method comprising: receiving first anonymous data associated with a first browser session initialized by a user via a browser on a user computing device, wherein the first anonymous data comprises one or more of a time, a date, one or more uniform resource locators (URLs), a referring URL, a browser type, a language, an internet protocol (IP) address, or location data; determining that the user accessed a URL during the first browser session; determining that the user has not been assigned a unique identifier based on a lack of stored location data for the user computing device; assigning the unique identifier to the user; 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 that provide more than just linking the judicial exception to a technological environment, but rather it provides specific technical elements such as URLs and browser sessions that deal with a problem in the realm of consumer privacy

data when tracking consumer behaviors online. This goes way beyond merely linking the judicial exception to a technological environment.

Thus the Independent Claims are not directed to an abstract idea under 2A Prong 2 of the 2019 PEG, as they are integrated into a practical application and thus eligible under 35 USC §101 Alice.

In addition, Applicant's arguments, filed 9/13/2022, with respect to 35 USC 101 have been fully considered and are persuasive. The Examiner withdraws 35 USC 101 rejection.

35 USC 103

The closest prior art of record includes Alon (US20140143655A1) in further view of Demsey (US20190199774A1) in further view of Jaffri (US20100323716A1) in further view of Siliski (US20130151645A1) but the references fail to teach the claim limitations.

Applicant's arguments filed 9/13/2022, are deemed to be persuasive and adequately reflect the Examiner's opinion as to why the claims 1-20 are allowable over this prior art of record. (See MPEP 1302.14).

Conclusion

The prior art made of record and not relied upon considered pertinent to Applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MUSTAFA IQBAL whose telephone number is (469)295-9241. The examiner can normally be reached Monday Thru Friday 9:30am-7:30 CST.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at <http://www.uspto.gov/interviewpractice>.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Stamber can be reached on 5712726724. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of published or unpublished applications may be obtained from Patent Center. Unpublished application information in Patent Center is available to registered users. To file and manage patent submissions in Patent Center, visit: <https://patentcenter.uspto.gov>. Visit <https://www.uspto.gov/patents/apply/patent-center> for more information about Patent Center and <https://www.uspto.gov/patents/docx> for information about filing in DOCX format. For additional questions, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MUSTAFA IQBAL/
Examiner, Art Unit 3683

<i>Index of Claims</i> 	Application/Control No. 17/687,992	Applicant(s)/Patent Under Reexamination Waishampayan et al.
	Examiner MUSTAFA IQBAL	Art Unit 3683

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

CLAIMS										
☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47										
CLAIM		DATE								
Final	Original	06/08/2022	10/03/2022							
1	1	✓	=							
2	2	✓	=							
3	3	✓	=							
4	4	✓	=							
5	5	✓	=							
6	6	✓	=							
7	7	✓	=							
8	8	✓	=							
9	9	✓	=							
10	10	✓	=							
11	11	✓	=							
12	12	✓	=							
13	13	✓	=							
14	14	✓	=							
15	15	✓	=							
16	16	✓	=							
17	17	✓	=							
18	18	✓	=							
19	19	✓	=							
20	20	✓	=							

Search Notes 	Application/Control No. 17/687,992	Applicant(s)/Patent Under Reexamination Waishampayan et al.
	Examiner MUSTAFA IQBAL	Art Unit 3683

CPC - Searched*		
Symbol	Date	Examiner
G06Q30/\$.cpc.	06/08/2022	MI
G06Q10/00-G06Q50/00	10/03/2022	MI
G06F16/955	10/03/2022	MI
H04L67/52	10/03/2022	MI
H04L63/0421	10/03/2022	MI

CPC Combination Sets - Searched*		
Symbol	Date	Examiner

US Classification - Searched*			
Class	Subclass	Date	Examiner
705	7.11-7.42	10/03/2022	MI

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

Search Notes		
Search Notes	Date	Examiner
NPL search was done.	06/08/2022	MI
Search was done. Please see attached Search	06/08/2022	MI
Search was updated, please see attached.	10/03/2022	MI
NPL search was done. Please see attached.	10/03/2022	MI
Discussed case at QEM, and was advised by Primary Yesildag to allow case.	10/03/2022	MI
Prior art rejection was dropped due to number of arts and weak combination.	10/03/2022	MI

/MUSTAFA IQBAL/ Examiner, Art Unit 3683	
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<i>Search Notes</i> 	Application/Control No. 17/687,992	Applicant(s)/Patent Under Reexamination Waishampayan et al.
	Examiner MUSTAFA IQBAL	Art Unit 3683

Interference Search			
US Class/CPC Symbol	US Subclass/CPC Group	Date	Examiner
705	7.34	10/03/2022	MI

/MUSTAFA IQBAL/ Examiner, Art Unit 3683	
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Issue Classification 	Application/Control No. 17/687,992	Applicant(s)/Patent Under Reexamination Waishampayan et al.
	Examiner MUSTAFA IQBAL	Art Unit 3683

CPC						
Symbol					Type	Version
G06Q	/	30	/	0205	F	2013-01-01
H04L	/	67	/	52	I	2022-05-01
G06F	/	16	/	955	I	2019-01-01
H04L	/	63	/	0421	I	2013-01-01

CPC Combination Sets					
Symbol				Type	Set
	/		/		

NONE (Assistant Examiner) _____ (Date) _____		Total Claims Allowed: 20	
/MUSTAFA IQBAL/ Examiner, Art Unit 3683 (Primary Examiner) _____ (Date) 03 October 2022		O.G. Print Claim(s) 1	O.G. Print Figure 1

Issue Classification 	Application/Control No. 17/687,992	Applicant(s)/Patent Under Reexamination Waishampayan et al.
	Examiner MUSTAFA IQBAL	Art Unit 3683

INTERNATIONAL CLASSIFICATION				
CLAIMED				
G06Q	/	30	/	00
H04L	/	67	/	00
G06F	/	16	/	00
H04L	/	63	/	00
NON-CLAIMED				
	/		/	

US ORIGINAL CLASSIFICATION	
CLASS	SUBCLASS
705	7.34

CROSS REFERENCES(S)						
CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)					

NONE (Assistant Examiner) _____ (Date) _____		Total Claims Allowed: 20	
/MUSTAFA IQBAL/ Examiner, Art Unit 3683 (Primary Examiner) _____ (Date) _____		03 October 2022 (Date)	O.G. Print Claim(s) 1
			O.G. Print Figure 1

Issue Classification 	Application/Control No. 17/687,992	Applicant(s)/Patent Under Reexamination Waishampayan et al.
	Examiner MUSTAFA IQBAL	Art Unit 3683

☒ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47															
CLAIMS															
Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
1	1	10	10	19	19										
2	2	11	11	20	20										
3	3	12	12												
4	4	13	13												
5	5	14	14												
6	6	15	15												
7	7	16	16												
8	8	17	17												
9	9	18	18												

NONE (Assistant Examiner) _____ (Date) _____		Total Claims Allowed: 20	
/MUSTAFA IQBAL/ Examiner, Art Unit 3683 (Primary Examiner) _____ (Date) 03 October 2022		O.G. Print Claim(s) 1	O.G. Print Figure 1

Google Scholar

anonymous consumer tracking URL

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Behavioral targeting: A case study of consumer tracking on levis. com

[PDF] ftc.gov

CA Dwyer - Available at SSRN 1508496, 2009 - papers.ssrn.com

... is **anonymous**. This defense does not address the one sided power that **tracking** can gives a marketer to influence an **anonymous** but very real **consumer** with their online purchases. ...

Save Cite Cited by 49 Related articles All 10 versions

Approximating purchase propensities and reservation prices from broad consumer tracking

[PDF] wiley.com

Full Text @ USPTO-STIC

BR Shiller - International Economic Review, 2020 - Wiley Online Library

... Just as classic second-degree price discrimination can increase expected profits from an **anonymous consumer**, combining personalization with the mechanics of second-degree price ...

Save Cite Cited by 17 Related articles All 7 versions

Pulling back the curtain: Online consumer tracking

[PDF] core.ac.uk

LJ Bowman - ISJLP, 2011 - HeinOnline

... Generally, the gathered information remains **anonymous**-a **consumer** is identified by a number assigned to the computer rather than the individual's name.Proponents of ...

Save Cite Cited by 5 Related articles All 2 versions

GhostBuy: An All-Steps Anonymous Purchase Platform (ASAPP) based on separation of data

[PDF] uottawa.ca

F Willems - 2021 - ruor.uottawa.ca

... We argue that from the **consumer's** perspective staying **anonymous** under normal circumstances, especially not being linked to a certain purchase (of certain products), is the required ...

Save Cite Cited by 2 Related articles All 3 versions

"Worth one minute": An anonymous rewarding platform for crowd-sensing systems

[PDF] ieee.org

Full Text @ USPTO-STIC

LC Klotenstein, S Delprioni, A Aldini... - Journal of ..., 2019 - ieeeexplore.ieee.org

... transformed **consumer** electronics available to everybody ... A trivial example could be a fitness **tracking** app which ..., seamlessly transitioning from the **URL** to the application and ...

Save Cite Cited by 5 Related articles All 3 versions

[PDF] An Evaluation of Self-Regulation of Consumer Tracking and Profiling: Deficiencies and Recommendations for Improvement

[PDF] w3.org

K Chow, N Petersen, CJ Hoofnagle - ... to W3C Workshop on Web Tracking ..., 2011 - w3.org

... of **URLs**, limits on data retention, limits on secondary use) while still giving the **consumer** the ... Consumers may not know that seemingly **anonymous** data could be linked to their personal ...

Save Cite Cited by 2 Related articles All 2 versions

Adnostic: Privacy preserving targeted advertising

[PDF] stanford.edu

Y Toubiana, A Narayanan, D Boneh... - Proceedings Network ..., 2010 - papers.ssrn.com

... **tracking**, we refer the reader to a case study of user **tracking** ... that a small fraction of all the **URLs** account for the majority of visits. ... most frequently bookmarked **URLs** account for 630,000 ...

Save Cite Cited by 439 Related articles All 6 versions

[HTML] Anonpri: A secure anonymous private authentication protocol for RFID systems

[HTML] sciencedirect.com

Full Text @ USPTO-STIC

F Rahman, ME Hoque, SI Ahmed - Information Sciences, 2017 - Elsevier

Launch Labs EX1002 Page 40

https://scholar.google.com/scholar?hl=en&as_sdt=0%2C47&q=anonymous+consumer+tracking+URL&btnG=[10/3/2022 5:54:25 PM]

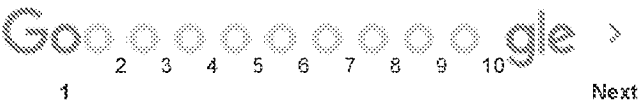
... RFID application **tracking** kids ... **consumer** and government due to potential privacy leakage of its users [29], [12]. Many RFID based **tracking** applications used in E-Passports, **consumer** ...
Save Cite Cited by 20 Related articles All 5 versions

[PDF] An enterprise digital right management scheme with **anonymous** trust for mobile devices [PDF] informatica.si Full View
JH Yang, HM Sun, PL Chen - Informatica, 2013 - informatica.si
... house sends the license to the **consumer**. Finally, the **consumer** has the access rights to use ...
... In addition, the proposed the usage **tracking** and user anonymity ht and the user privacy can ...
Save Cite Cited by 5 Related articles All 10 versions

[PDF] What Are They Trying to Accomplish on my Website, [PDF] gerad.ca
Now? Dynamic Identification of **Anonymous** Consumers' Visit Goals
S.Sen cal, P.J.Kalczynski, M.Fredette - Les Cahiers du GERAD ISSN, 2008 - gerad.ca
... they remain **anonymous** early in the site session (unless a **tracking** ... click performed by the **anonymous consumer**; it may help ... , traversal initiated) and the **URL** of every page visited were ...
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Related searches

behavioral targeting consumer tracking
reservation prices consumer tracking



PE2E SEARCH - Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	British Equivalents	Time Stamp
L1	2488	(web webpage website site) WITH (traffic\$4 visit\$4) WITH (anonym\$6)	(US-PGPUB; USPAT; USOCR; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, SE, SG, SI, SK, TH, TN, TR, TW, UA, VN); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2022/06/01 06:37 PM
L2	1593	(web webpage website site) WITH (traffic\$4 visit\$4) WITH (anonym\$6)	(US-PGPUB; USPAT)	OR	ON	ON	2022/06/01 06:37 PM
L3	0	(web webpage website site) WITH (traffic\$4 visit\$4) WITH (anonym\$6) WITH (longitud\$6)	(US-PGPUB; USPAT)	OR	ON	ON	2022/06/01 06:38 PM
L4	100	(web webpage website site) WITH (traffic\$4 visit\$4) WITH (anonym\$6) WITH (location region zone)	(US-PGPUB; USPAT)	OR	ON	ON	2022/06/01 06:38 PM
L5	805	(web webpage website site) WITH (traffic\$4 visit\$4) WITH (track\$4 location) WITH (opt\$4)	(US-PGPUB; USPAT)	OR	ON	ON	2022/06/02 12:11 PM
L6	310	(web webpage website site) WITH (traffic\$4 visit\$4) WITH (track\$4 location) WITH (opt\$4) AND G06Q30/\$.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2022/06/02 12:11 PM
L7	259	(web webpage website) WITH (traffic\$4 visit\$4) WITH (track\$4 location) WITH (opt\$4) AND G06Q30/\$.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2022/06/02 12:12 PM
L8	0	(longitud\$4) WITH (opt\$4 near5 out) AND G06Q30/\$.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2022/06/02 12:21 PM
L9	1237	(location track\$4) WITH (opt\$4 near5 out) AND G06Q30/\$.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2022/06/02 12:22 PM

L10	413	(location track\$4) WITH ("opt-out") AND G06Q30/\$.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2022/06/02 12:22 PM
L11	40	(location track\$4) WITH ("opt-out") WITH (location track\$5) AND G06Q30/\$.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2022/06/02 12:22 PM
L12	40	(location track\$4) WITH ("opt-out") WITH (location track\$5) AND G06Q30/\$.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2022/06/02 12:26 PM
L13	1	(location track\$4) WITH ("opt-out") WITH (location track\$5) AND G06Q30/\$.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2022/06/02 12:26 PM
L14	25	("opt-out") WITH (location track\$5) AND G06Q30/\$.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2022/06/02 12:27 PM
L15	5	("opt-out") WITH (location track\$5) AND G06Q30/\$.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2022/06/02 12:36 PM
L16	0	("opt-out") WITH (location track\$5) AND G06Q30/\$.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2022/06/02 12:50 PM
L17	1	("opt-out") WITH (location track\$5) AND G06Q30/\$.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2022/06/02 12:50 PM
L18	852	("opt-out") WITH (location track\$5) AND G06Q30/\$.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2022/06/02 12:52 PM
L19	329	("opt-out") WITH (location track\$5) AND G06Q30/\$.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2022/06/02 12:53 PM
L20	180	("opt-out") WITH (location track\$5) AND G06Q30/\$.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2022/06/02 12:53 PM
L21	113	("opt-out") WITH (location track\$5) AND G06Q30/\$.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2022/06/02 12:53 PM
L22	11	((US-20210194934-A1 OR US-20200065736-A1 OR US-20150019323-A1 OR US-20140143655-A1 OR US-20210192081-A1 OR US-20190199774-A1 OR US-20180252793-A1 OR US-20130151645-A1 OR US-20130031169-A1 OR US-20110289090-A1 OR US-20100323716-A1) AND G06Q30/\$.cpc.	(US-PGPUB; USPAT; USOCR; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, SE, SG, SI, SK, TH, TN, TR, TW, UA, VN); FPRS; EPO;	OR	ON	ON	2022/06/02 07:16 PM

L23	5	A1).did. AND PGPB.dbnm.) L22 AND cookie\$4	JPO; DERWENT; IBM_TDB) (US-PGPUB; USPAT; USOCR; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, SE, SG, SI, SK, TH, TN, TR, TW, UA, VN); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2022/06/02 07:16 PM
L24	5	L22 AND cookie\$4 AND (opt\$6)	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, OA, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2022/06/02 07:17 PM
L25	33	("opt-in") WITH (track\$4) WITH (cookie\$4)	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, OA, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2022/06/02 07:20 PM
L26	0	("opt-in") WITH (track\$4) WITH (cookie\$4) WITH (folder near10 browser)	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS,	OR	ON	ON	2022/06/02 07:45 PM

L27	0	("opt-in") WITH (cookie\$4) WITH (folder near10 browser)	IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, OA, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB) (US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, OA, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2022/06/02 07:45 PM
L28	196	(cookie\$4) WITH (folder near10 browser) WITH (stor\$6)	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, OA, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2022/06/02 07:45 PM
L29	37	(cookie\$4) WITH (folder near10 browser) WITH (stor\$6) AND G06Q30/\$.cpc.	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, OA, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2022/06/02 07:46 PM

L30	26	(cookie\$4) WITH (folder near10 browser) WITH (stor\$6) AND G06Q30/\$.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2022/06/02 07:46 PM
L31	330	(product good) WITH (interest\$4) WITH (URL visit\$4) WITH (notification notif\$5 advertisement ad) AND G06Q30/\$.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2022/06/02 08:04 PM
L32	91	(increas\$4) WITH (interest\$4) WITH (URL visit\$4) WITH (product good service) AND G06Q30/\$.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2022/06/02 08:12 PM
L33	0	((("FullThrottle") near3 ("Technologies") near3 ("LLC"))).AS,AANM.	(USPAT)	OR	ON	ON	2022/06/08 05:02 PM
L34	0	((("FullThrottle") near3 ("Technologies") near3 ("LLC"))).AS,AANM.	(US-PGPUB; USPAT; USOCR; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, SE, SG, SI, SK, TH, TN, TR, TW, UA, VN); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2022/06/08 05:02 PM
L35	1	((("WAISHAMPAYAN") near3 ("Amol")) OR (("O'FLAHERTY") near3 ("Pat")) OR (("YAKOVLEV") near3 ("Alexey"))).INV.	(US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT)	OR	ON	ON	2022/06/08 05:02 PM
L36	2583	(web webpage website site) WITH (traffic\$4 visit\$4) WITH (anonym\$6)	(US-PGPUB; USPAT; USOCR; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, SE, SG, SI, SK, TH, TN, TR, TW, UA, VN); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2022/10/03 07:18 PM

L37	1643	(web webpage website site) WITH (traffic\$4 visit\$4) WITH (anonym\$6)	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/03 07:18 PM
L38	0	(web webpage website site) WITH (traffic\$4 visit\$4) WITH (anonym\$6) WITH (longitud\$6)	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/03 07:18 PM
L39	102	(web webpage website site) WITH (traffic\$4 visit\$4) WITH (anonym\$6) WITH (location region zone)	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/03 07:18 PM
L40	847	(web webpage website site) WITH (traffic\$4 visit\$4) WITH (track\$4 location) WITH (opt\$4)	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/03 07:18 PM
L41	317	(web webpage website site) WITH (traffic\$4 visit\$4) WITH (track\$4 location) WITH (opt\$4) AND G06Q30/\$.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/03 07:18 PM
L42	266	(web webpage website) WITH (traffic\$4 visit\$4) WITH (track\$4 location) WITH (opt\$4) AND G06Q30/\$.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/03 07:18 PM
L43	0	(longitud\$4) WITH (opt\$4 near5 out) AND G06Q30/\$.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/03 07:18 PM
L44	1265	(location track\$4) WITH (opt\$4 near5 out) AND G06Q30/\$.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/03 07:18 PM
L45	422	(location track\$4) WITH ("opt-out") AND G06Q30/\$.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/03 07:18 PM
L46	41	(location track\$4) WITH ("opt-out") WITH (locat stor\$5) AND G06Q30/\$.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/03 07:18 PM
L47	41	(location track\$4) WITH ("opt-out") WITH (locat stor\$5 cach\$4) AND G06Q30/\$.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/03 07:18 PM
L48	1	(location track\$4) WITH ("opt-out") WITH (cach\$4) AND G06Q30/\$.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/03 07:18 PM
L49	25	("opt-out") WITH (cach\$4) AND G06Q30/\$.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/03 07:18 PM
L50	5	("opt-out") WITH (track\$4 location) WITH	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/03 07:18 PM

L51	0	(cach\$4) ("opt-out") WITH (track\$4 location) WITH (latitude)	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/03 07:18 PM
L52	1	("opt-out") WITH (latitude)	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/03 07:18 PM
L53	863	("opt-out") WITH (location gps)	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/03 07:18 PM
L54	333	("opt-out") WITH (location gps) AND (website webpage)	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/03 07:18 PM
L55	182	("opt-out") WITH (location gps) AND (website webpage) AND (latitude coordinat\$4)	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/03 07:18 PM
L56	114	("opt-out") WITH (location gps) AND (website webpage) AND (latitude)	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/03 07:18 PM
L57	11	((US-20210194934-A1 OR US-20200065736- A1 OR US- 20150019323-A1 OR US-20140143655-A1 OR US-20210192081- A1 OR US- 20190199774-A1 OR US-20180252793-A1 OR US-20130151645- A1 OR US- 20130031169-A1 OR US-20110289090-A1 OR US-20100323716- A1).did. AND PGPB.dbnm.)	(US-PGPUB; USPAT; USOCR; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, SE, SG, SI, SK, TH, TN, TR, TW, UA, VN); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2022/10/03 07:18 PM
L58	5	L22 AND cookie\$4	(US-PGPUB; USPAT; USOCR; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, SE, SG, SI, SK, TH, TN, TR, TW, UA, VN); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2022/10/03 07:18 PM
L59	5	L22 AND cookie\$4 AND (opt\$6)	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, BE, BG, BR, BY,	OR	ON	ON	2022/10/03 07:18 PM

L60	36	("opt-in") WITH (track\$4) WITH (cookie\$4)	CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, OA, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB) (US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, OA, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2022/10/03 07:18 PM
L61	0	("opt-in") WITH (track\$4) WITH (cookie\$4) WITH (folder near10 browser)	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, OA, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2022/10/03 07:18 PM
L62	0	("opt-in") WITH (cookie\$4) WITH (folder near10 browser)	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, OA, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2022/10/03 07:18 PM

L63	200	(cookie\$4) WITH (folder near10 browser) WITH (stor\$6)	TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB) (US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, OA, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2022/10/03 07:18 PM
L64	37	(cookie\$4) WITH (folder near10 browser) WITH (stor\$6) AND G06Q30/\$.cpc.	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, OA, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2022/10/03 07:18 PM
L65	26	(cookie\$4) WITH (folder near10 browser) WITH (stor\$6) AND G06Q30/\$.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/03 07:18 PM
L66	471	(product good) WITH (interest\$4) WITH (URL visit\$4) WITH (notification notif\$5 advertisement ad) AND G06Q30/\$.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/03 07:18 PM
L67	102	(increas\$4) WITH (interest\$4) WITH (URL visit\$4) WITH (product good service) AND G06Q30/\$.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/03 07:18 PM
L68	0	((("FullThrottle") near3 ("Technologies") near3 ("LLC"))).AS,AANM.	(USPAT)	OR	ON	ON	2022/10/03 07:18 PM
L69	0	((("FullThrottle") near3 ("Technologies") near3	(US-PGPUB; USPAT; USOCR; FIT (AU, AP,	OR	ON	ON	2022/10/03 07:18 PM

		("LLC"))).AS,AANM.	AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, SE, SG, SI, SK, TH, TN, TR, TW, UA, VN); FPRS; EPO; JPO; DERWENT; IBM_TDB)				
L70	1	((("WAISHAMPAYAN") near3 ("Amol")) OR ((("O'FLAHERTY") near3 ("Pat")) OR ((("YAKOVLEV") near3 ("Alexey")))).INV.	(US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT)	OR	ON	ON	2022/10/03 07:18 PM
L71	0	((browser) near10 (anonymous) near10 (URL) near10 (protocol near3 internet)).clm.	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/03 07:25 PM
L72	0	((browser) near10 (anonymous) near10 (URL) near10 (protocol near3 internet))	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/03 07:25 PM
L73	21	(browser) near10 (anonymous) near10 (URL)	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/03 07:25 PM

PE2E SEARCH - Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	British Equivalents	Time Stamp
N1	1	((("WAISHAMPAYAN") near3 ("Amol")) OR ((("O'FLAHERTY") near3 ("Pat")) OR ((("YAKOVLEV") near3 ("Alexey")))).INV.	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/03 07:18 PM
N2	0	((("FullThrottle") near3 ("Technologies") near3 ("LLC"))).AS,AANM.	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/03 07:19 PM
N3	0	N1 AND N2	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/03 07:19 PM
N4	0	G06Q30/0205.cpc. AND G06F16/955.cpc. AND H04L67/52.cpc. AND H04L63/0421.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/03 07:20 PM
N5	0	G06Q30/0205.cpc. AND G06F16/955.cpc. AND H04L67/52.cpc. AND H04L63/0421.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/03 07:20 PM

N7	0	AND 705/7.34.ccls. N5 AND N3	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/03 07:20 PM
N8	0	((browser) near10 (anonymous) near10 (URL) near10 (protocol near3 internet)).clm.	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/03 07:21 PM
N9	0	((location) near10 (identifier) near10 (tracker) near10 (browser)).clm.	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/03 07:22 PM
N10	0	((second) near10 (visit) near10 (URL) near10 (API)).clm.	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/03 07:23 PM
N12	65	((address) near10 (demographic) near10 (profile) near10 (information)).clm.	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/03 07:24 PM
N13	0	((address) near10 (demographic) near10 (profile) near10 (information) near10 (URL)).clm.	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/03 07:24 PM
N14	0	((interest) near10 (cache) near10 (profile) near10 (information) near10 (URL)).clm.	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/03 07:24 PM

Bibliographic Data

Application No: 17/687,992

Foreign Priority claimed: ☐ Yes ☒ No

35 USC 119 (a-d) conditions met: ☐ Yes ☒ No ☐ Met After Allowance

Verified and Acknowledged: /MUSTAFA IQBAL/

Examiner's Signature

Initials

Title:

LOCATION DETERMINATION USING ANONYMOUS
BROWSER DATA

FILING or 371(c) DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
03/07/2022	705	3683	
RULE			

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CONTINUING DATA

This application has PRO of 63208275 06/08/2021

FOREIGN APPLICATIONS

IF REQUIRED, FOREIGN LICENSE GRANTED**

03/09/2022

** SMALL ENTITY **

STATE OR COUNTRY

UNITED STATES

ADDRESS

FILING FEE RECEIVED

\$3,000

DOCKET NO.: FLTH_0002
Application No.: 17/687,992
Office Action Dated: June 13, 2022

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:
FullThrottle Technologies, LLC

Confirmation No.: 3742

Application No.: 17/687,992

Group Art Unit: 3683

Filing Date: March 7, 2022

Examiner: IQBAL, MUSTAFA

For: LOCATION DETERMINATION USING ANONYMOUS BROWSER DATA

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Director:

REPLY PURSUANT TO 37 CFR § 1.111

In response to the Official Action dated **June 13, 2022**, reconsideration is respectfully requested in view of the amendments and/or remarks as indicated below:

- ☐ **Amendments to the Specification** begin on page N/A of this paper.
- ☒ **Amendments to the Claims** are reflected in the listing of the claims which begins on page 2 of this paper.
- ☐ **Amendments to the Drawings** begin on page N/A of this paper and include an attached replacement sheet.
- ☒ **Remarks** begin on page 9 of this paper.
- ☒ The Commissioner is hereby authorized to charge any fee deficiency, charge any additional fees, or credit any overpayment of fees, associated with this application in connection with this filing, or any future filing, submitted to the U.S. Patent and Trademark Office during the pendency of this application, to Deposit Account No. 50-3541.

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

What is claimed is:

1. (Currently Amended) A method comprising:
 - receiving first anonymous data associated with a first browser session initialized by a user via a browser on a user computing device, wherein the first anonymous data comprises one or more of a time, a date, one or more uniform resource locators (URLs), a referring URL, a browser type, a language, an internet protocol (IP) address, or location data;
 - determining that the user accessed a URL during the first browser session;
 - determining that the user has not been assigned a unique identifier based on a lack of stored location data for the user computing device;
 - assigning the unique identifier to the user;
 - 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;
 - 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;
 - determining a latitude coordinate and a longitude coordinate of the user computing device, during the first browser session, wherein the latitude coordinate and 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);
 - associating the unique identifier to the physical address;

generating a user profile for the user using the unique identifier and physical address, the user profile comprising profile information that comprises one or more URLs the user has accessed, the frequency with which the user accessed the URL(s), demographics associated with the user, the address(es) associated with the user, or the devices associated with the user;

updating the profile information based on second anonymous data associated with a second browser session initialized on the user computing device or another user computing device associated with the physical address;

identifying a second visit to the URL during the second browser session using the unique identifier stored in the local browser cache;

determining, using the updated profile information, a confidence rating for the user, the confidence rating indicating a quantifiable measure of the user's interest in a product;

generating one or more notifications based on one or more of the updated profile information or the confidence rating; and

determining when to send the one or more notifications to the user.

2. (Currently Amended) The method of claim 1, wherein the physical address is a first physical address, the method further comprising:

determining a second physical address for the user computing device while accessing the URL during the second browser session based on the second anonymous data; and

associating the second physical address to the user profile based on

~~determining that the user accessed a URL during the first browser session; and~~

~~recognizing a second visit to the URL during the second browser session using the unique identifier stored in the local browser cache.~~

3. (Original) The method of claim 1, further comprising, installing, upon determining that the user opted-in to location tracking, the location tracker in the browser.

4. (Original) The method of claim 1, further comprising determining personal information associated with the user, the personal information comprising one or more of an address type, a name of the user, an age of the user, a gender of the user, demographics associated with the user, or psychographics associated with the user, wherein the personal information is used to generate the user profile and determine the confidence rating.
5. (Original) The method of claim 4, wherein the address type comprises one or more of a residential address, a single family home, an apartment building, or a commercial address, wherein when the address type is a residential address, the user profile is associated with the residential address such that information associated with the residential address is used to generate the user profile.
6. (Original) The method of claim 1, wherein the one or more notifications comprise one or more of an email, a text message, a mobile phone notification, a phone call, or a digital display.
7. (Original) The method of claim 1, further comprising:
determining a specific product of interest based on the URLs that the user visited; and
generating the one or more notifications based on the specific product of interest.
8. (Original) The method of claim 1, further comprising updating the determined confidence rating upon subsequent visits to the specific URL to indicate an increase in the user's interest in the product.
9. (Original) The method of claim 1, wherein the anonymous data comprises the latitude coordinate and the longitude coordinate.
10. (Original) The method of claim 1, wherein the location tracker is stored in a folder associated with the browser.

11. (Currently Amended) A non-transitory, machine-readable storage device that includes instructions that, when executed by a computing device, cause the computing device to:

receive first anonymous data associated with a first browser session initialized by a user via a browser on a user computing device, wherein the first anonymous data comprises one or more of a time, a date, one or more uniform resource locators (URLs), a referring URL, a browser type, a language, an internet protocol (IP) address, or location data;

determine that the user accessed a URL during the first browser session;

determine that the user has not been assigned a unique identifier based on a lack of stored location data for the user computing device;

assign the unique identifier to the user;

determine whether the user opted-in to or out of location tracking, based on whether a location tracker is installed on the user computing device;

send, 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;

determine a latitude coordinate and a longitude coordinate of the user computing device, during the first browser session, wherein the latitude coordinate and 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;

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);

associate the unique identifier to the physical address;

generate a user profile for the user using the unique identifier and physical address, the user profile comprising profile information that comprises one or more URLs the user has accessed, the frequency with which the user accessed the URL(s), demographics associated with the user, the address(es) associated with the user, or the devices associated with the user;

update the profile information based on second anonymous data associated with a second browser session initialized on the user computing device or another user computing device associated with the physical address;

identify a second visit to the URL during the second browser session using the unique identifier stored in the local browser cache;

determine, using the updated profile information, a confidence rating for the user, the confidence rating indicating a quantifiable measure of the user's interest in a product;

generate one or more notifications based on one or more of the updated profile information or the confidence rating; and

determine when to send the one or more notifications to the user.

12. (Currently Amended) The non-transitory, machine-readable storage device of claim 11, wherein the physical address is a first physical address, and wherein the instructions, when executed by the computing device, cause the computing device to:

determine a second physical address for [[that]] the user computing device while accessing the URL during the second browser session based on the second anonymous data ~~accessed a URL during the first browser session;~~ and

associating the second physical address to the user profile based on ~~recognize a second visit to the URL during the second browser session using~~ the unique identifier stored in the local browser cache.

13. (Original) The non-transitory, machine-readable storage device of claim 11, wherein the instructions, when executed by the computing device, cause the computing device to install, upon determining that the user opted-in to location tracking, the location tracker in the browser.

14. (Original) The non-transitory, machine-readable storage device of claim 11, wherein the instructions, when executed by the computing device, cause the computing device to determine personal information associated with the user, the personal information comprising one or more

of an address type, a name of the user, an age of the user, a gender of the user, demographics associated with the user, or psychographics associated with the user, wherein the personal information is used to generate the user profile and determine the confidence rating.

15. (Original) The non-transitory, machine-readable storage device of claim 14, wherein the address type comprises one or more of a residential address, a single family home, an apartment building, or a commercial address, wherein when the address type is a residential address, the user profile is associated with the residential address such that information associated with the residential address is used to generate the user profile.

16. (Original) The non-transitory, machine-readable storage device of claim 11, wherein the one or more notifications comprise one or more of an email, a text message, a mobile phone notification, a phone call, or a digital display.

17. (Original) The non-transitory, machine-readable storage device of claim 11, wherein the instructions, when executed by the computing device, cause the computing device to:

- determine a specific product of interest based on the URLs that the user visited; and
- generate the one or more notifications based on the specific product of interest.

18. (Original) The non-transitory, machine-readable storage device of claim 11, wherein the instructions, when executed by the computing device, cause the computing device to update the determined confidence rating upon subsequent visits to the specific URL to indicate an increase in the user's interest in the product.

19. (Original) The non-transitory, machine-readable storage device of claim 11, wherein the anonymous data comprises the latitude coordinate and the longitude coordinate.

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20. (Original) The non-transitory, machine-readable storage device of claim 11, wherein the location tracker is stored in a folder associated with the browser.

REMARKS

Claims 1-20 are pending in the application. Claims 1, 2, 11, and 12 have been amended. No claims have been added or cancelled. Support for the amendments to the claims can be found throughout the disclosure, and particularly in paragraphs [0038], [0039], [0044], and [0086] of the as-filed specification, for example. No new matter has been added.

Interview Request

Applicant respectfully requests that Examiner Iqbal contact the undersigned to schedule an examiner interview prior to substantively considering this response.

Claim Rejections Under 35 U.S.C. § 101

Claims 1-20 stand rejected under 35 U.S.C. § 101 for allegedly being directed to a judicial exception without significantly more. Applicant traverses.

First, large portions of each step of the claims failed to be considered in the analysis of the claims (1) when identifying recitations of abstract idea(s) under Step 2A, Prong 1, or (2) when evaluating any additional elements recited in the claim beyond the judicial exception(s) under Step 2A, Prong 2. In analyzing each step of the claims in the Step 2A, Prong 1 analysis, the Office Action only cites to the first portion of each step (e.g., “receiving first anonymous data associated with...”) and completely ignores the rest of the subject matter in each step of the claim. All of the portions of claim 1 were not considered in the analysis in the Office Action under either (1) Step 2A, Prong 1 when identifying the recitations of an abstract idea; or (2) the Step 2A, Prong 2 analysis where any additional elements must be considered. Though the Office Action argues that each step for which a portion of the step is being cited recites an abstract idea, there is no analysis as to how the above-emphasized subject matter that has been omitted allegedly recites an abstract idea. In fact, the above-emphasized portions of the claims recite subject matter that would prevent the claims from being directed to an abstract idea, or at least be considered as specific limitations other than what is well-understood, routine, conventional

activity in the field or adding unconventional steps that confine the claim to a particular useful application. This omission of most of the subject matter of the claims obviously makes each step appear much more abstract than actually claimed and fails to give Applicant an opportunity to rebut the characterization of the subject matter as being directed to an abstract idea when analyzing the claims under Step 2A, Prong 1. This form of analysis also fails to give Applicant an opportunity to rebut why these portions of the claim may be considered as additional elements that incorporate the alleged abstract idea into a practical application under Step 2A, Prong 2.

Additionally, as claim 11 is directed to a “machine readable storage device”, respectively, the Step 2A, Prong 1 analysis in the Office Action is inappropriate for failing to provide any indication of how the steps of a “machine readable storage device” can be considered “organizing human activity”, as suggested for the method of claim 1. (Office Action, p. 5). Instead, the Office Action provides Step 2A, Prong 1 analysis of the method claim 1 and merely groups claim 11 into the same analysis inappropriately. As required by MPEP § 2106, “a complete examination should be made for every claim” when performing analysis under Section 101 (emphasis added).

For at least the above reasons, Appellant respectfully submits that the Office Action has not met its burden of showing that claims 1 or 11 should be rejected under 35 U.S.C. § 101. As the claims depending therefrom are rejected using similar analysis, the FOA has also not met its burden of showing that the dependent claims should be rejected under 35 U.S.C. § 101.

Moreover, Applicant respectfully submits that even if the claims could arguably be directed to a judicial exception (which Applicant submits they are not), the claims are patent eligible because the claims include specific limitations other than what is well-understood, routine, conventional activity in the field. (See MPEP § 2106.05(d)). For example, the claims include specific limitations that are associated with a user that opts-out of location tracking (Specification, para. [0055]). As explained in the Specification, a user may be asked to opt-in to location tracking when accessing a URL . (Specification, para. [0053]). When a user opts-in to location tracking, a tracker (e.g., a cookie) may be installed in a browser application on a user

computing device. (Specification, para. [0054]). And, the tracker may retrieve geo-location data from the user computing device. (Specification, para. [0054]). However, when a user opts-out of location tracking, the tracker may not be installed on the user computing device and thus cannot be used to retrieve geo-location data from the user computing device. (Specification, para. [0055]). The claims include specific limitations that detail how the user can be tracked without the use of tracking cookies. For example, a unique identifier may be sent to the user computing device, upon determining that the user opted-out of location tracking, for storage in a local browser cache. And, a latitude coordinate and a longitude coordinate may be determined based on anonymous data upon determining that the user opted-out of location tracking. For at least the reason that the claims include specific limitations that may enable tracking of a user without the use of tracking cookies (Specification, para. [0048]), the claims include additional elements that amount to significantly more than the abstract idea, and as explained above, Applicant submits that the claims are patent eligible.

Claim Rejections Under 35 U.S.C. § 103

Claims 1, 2, 4, 5, 6, 9-12, 14, 15, 16, 19, and 20 stand rejected under 35 U.S.C. § 103 for allegedly being unpatentable over the combination of U.S. Patent Application Publication No. 2014/0143655 A1, (“Alon”), U.S. Patent Application Publication No. 2019/0199774 A1 (“Demsey”), U.S. Patent Application Publication No. 2010/0323716 A1 (“Jaffri”), and U.S. Patent Application Publication No. 2013/0151645 A1 (“Siliski”). Claims 3 and 13 stand rejected under 35 U.S.C. § 103 for allegedly being unpatentable over the combination of Alon, Demsey, Jaffri, Siliski, and U.S. Patent No. 8,935,797 B1, (“Silver”). Claims 7, 8, 17, and 18 stand rejected under 35 U.S.C. § 103 for allegedly being unpatentable over the combination of Alon, Demsey, Jaffri, Siliski, and U.S. Patent Application Publication No. 2020/0233911 A1, (“Siroker”).

Applicant respectfully traverses the rejections, under 35 U.S.C. § 103, of claims 1-20. To advance prosecution, independent claims 1 and 11 are amended herein without prejudice and without conceding the rejections. In view of the amendments to claims 1 and 11, Applicant

submits that the claims are patentable over the asserted references for at least the following reasons.

The asserted references do not teach or suggest identifying a second visit to the URL during the second browser session using the unique identifier stored in the local browser cache

The Office Action admits that Alon does not teach or suggest recognizing a second visit to the URL during the second browser session using the unique identifier. (Office Action, p. 21). Instead, the Office Action relies on Demsey for allegedly teaching such subject matter. However, both Alon and Demsey are completely silent with respect to *identifying a second visit* to the URL during the second browser session *using the unique identifier stored in the local browser cache* as recited in claim 1, and similarly in claim 11.

Alon discloses statistically analyzing the behavior of anonymous visitors that are navigating in an internet website (Alon, para. [0030]). And even though Alon discloses an anonymous visitors' "second visit to a website" (Alon, para. [0033]), Alon does not disclose identifying the second visit using a unique identifier stored in the local browser cache.

Demsey does not cure the deficiencies of Alon. Demsey discloses storing cookies on a cache of a web browser (Demsey, para. [0038]). But, Demsey is silent with respect to identifying the second visit *using a unique identifier* stored in the local browser cache. Thus, the asserted references cannot be said to teach or suggest *identifying a second visit* to the URL during the second browser session *using the unique identifier stored in the local browser cache*.

The asserted references do not teach or suggest 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

The Office Action admits that Alon does not teach or suggest *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. (Office Action, p. 15). Instead, the Office Action relies on Demsey for allegedly teaching such subject matter.

However, Demsey is completely silent with respect to *sending, upon determining that a user opted-out* of location tracking, *the unique identifier* to a user computing device as recited in claim 1, and similarly in claim 11. Rather, Demsey discloses that when a user of a mobile device opts-out of allowing use of a durable ID (DID), the method terminates after cleanup actions are performed. (Demsey, para. [0048]). And, the cleanup actions in Demsey include providing script to the mobile device to *erase any obtained DID from the mobile device*. (Demsey, para. [0053]). That is, when a user opts-out in Demsey, an identifier is erased from the mobile device which is the opposite of sending a unique identifier for storage. Thus, the asserted references cannot be said to teach or suggest *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.

CONCLUSION

Applicant submits that the present application is in condition for allowance. A Notice of Allowance is respectfully requested. The Examiner is invited to call Applicant's undersigned representative to discuss the application should the Examiner determine that such a discussion may advance prosecution.

Date: September 13, 2022

/Ryan A. Peddle/

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Title of Invention:	LOCATION DETERMINATION USING ANONYMOUS BROWSER DATA
First Named Inventor/Applicant Name:	Amol Waishampayan
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Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		FLTH_0002_Response_to_Non-Final_Office_Action.pdf	179845 55fd60ba77bd18c5c3a250f8df79bf519ff731b0	yes	13

	Multipart Description/PDF files in .zip description		
	Document Description	Start	End
	Amendment/Request for Reconsideration-After Non-Final Rejection	1	1
	Claims	2	8
	Applicant Arguments/Remarks Made in an Amendment	9	13
Warnings:			
Information:			
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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875				Application or Docket Number 17/687,992		Filing Date 03/07/2022		☐ To be Mailed			
ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO											
APPLICATION AS FILED - PART I											
		(Column 1)		(Column 2)							
FOR		NUMBER FILED		NUMBER EXTRA		RATE (\$)		FEE (\$)			
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))		N/A		N/A		N/A					
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))		N/A		N/A		N/A					
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))		N/A		N/A		N/A					
TOTAL CLAIMS (37 CFR 1.16(i))		minus 20 = *				x \$50 =					
INDEPENDENT CLAIMS (37 CFR 1.16(h))		minus 3 = *				x \$240 =					
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))		If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).									
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))											
* If the difference in column 1 is less than zero, enter "0" in column 2.						TOTAL					
APPLICATION AS AMENDED - PART II											
		(Column 1)		(Column 2)		(Column 3)					
AMENDMENT	09/13/2022	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR		PRESENT EXTRA		RATE (\$)		ADDITIONAL FEE (\$)	
	Total (37 CFR 1.16(i))	* 20	Minus	** 20	= 0			x \$50 =		0	
	Independent (37 CFR 1.16(h))	* 2	Minus	*** 3	= 0			x \$240 =		0	
	☐ Application Size Fee (37 CFR 1.16(s))										
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))										
								TOTAL ADD'L FEE		0	
		(Column 1)		(Column 2)		(Column 3)					
AMENDMENT		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR		PRESENT EXTRA		RATE (\$)		ADDITIONAL FEE (\$)	
	Total (37 CFR 1.16(i))	*	Minus	**	=			x \$0 =			
	Independent (37 CFR 1.16(h))	*	Minus	***	=			x \$0 =			
	☐ Application Size Fee (37 CFR 1.16(s))										
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))										
								TOTAL ADD'L FEE			
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.								LIE			
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".								/PEARLIE A FENNELL/			
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".											
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.											

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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54380	7590	06/13/2022	EXAMINER	
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Philadelphia, PA 19103				
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			06/13/2022	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

FGdocketing@flastergreenberg.com

USP@flastergreenberg.com

DETAILED ACTION

Notice of Pre-AIA or AIA Status

- The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

Acknowledgments

- Claims 1-20 are pending.
- Applicant did not provide information disclosure statement (IDS).

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to a judicial exception (i.e., a law of nature, a natural phenomenon, or an abstract idea) without significantly more than the judicial exception itself.

Regarding Step 1 of the Subject Matter Eligibility Test for Products and Processes (from 2019 Revised Patent Subject Matter Eligibility Guidance), claims 1-20 are directed to the statutory category of a method and non-transitory computer readable medium.

Regarding step 2A-1, Claims 1-20 recite a Judicial Exception. Exemplary independent claim 1 and similarly claim 11 recite the limitations of

receiving first anonymous data associated with...**determining** that the user has not been assigned a unique identifier...**assigning** the unique identifier to the user; **determining** whether the user opted-in to or out of location tracking...**sending**, upon determining that the user opted-out of location tracking, the unique identifier... **determining** a latitude coordinate and a longitude coordinate of the user ... **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...**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...**associating** the unique identifier to the physical address; **generating** a user profile for the user using the unique identifier and physical address, the user profile comprising profile information that comprises one or more URLs the user has accessed, the frequency with which the user accessed the URL(s), demographics associated with the user, the address(es) associated with the user, or the devices associated with the user; **updating** the profile information based on second anonymous data associated with a second browser session initialized on the user computing device or another user computing device associated with the physical address; **determining**, using the updated profile information, a confidence rating for the user, the confidence rating indicating a quantifiable measure of the user's interest in a product; **generating** one or more notifications based on one or more of the updated profile information or the confidence rating; and **determining** when to send the one or more notifications to the user.

These limitations, as drafted, are a process that, under its broadest reasonable interpretation cover concepts of consumer behavior, business relations, and sale/advertisement activities which fall under the abstract idea grouping of certain methods of organizing human activity. The Applicant's specification clearly state gauging consumer behavior in para 0002 and talk about advertisements in para 0034. It is clear the limitations recite this abstract idea grouping, but for the recitations of generic computer components. The mere nominal recitations of generic computer components does not take the limitations out of the certain methods of organizing human activity grouping.

Regarding step 2A-2- This judicial exception is not integrated into a practical application, and the claims do not include additional elements that are sufficient to amount to significantly more than the judicial exception.

The claim recites the additional elements of non-transitory computer readable medium, computing device, cache, and digital display. These components are recited at a high level of generality, and merely automate the steps. Each of the additional limitations is no more than mere instructions to apply the exception using a generic computer component.

The combination of these additional elements is no more than mere instructions to apply the exception using a generic computer components or software. Accordingly, even in combination, these additional elements do not integrate the abstract idea into a practical application because they do not impose any meaningful limits on practicing the abstract idea.

Further, the claims do not provide for recite any improvements to the functioning of a computer, or to any other technology or technical field; applying or using a judicial exception to effect a particular treatment or prophylaxis for a disease or medical condition; applying the judicial exception with, or by use of, a particular machine; effecting a transformation or reduction of a particular article to a different state or thing; or applying or using the judicial exception in some other meaningful way beyond generally linking the use of the judicial exception to a particular technological environment, such that the claim as a whole is more than a drafting effort designed to monopolize the exception.

The dependent claims have the same deficiencies as their parent claims as being directed towards an abstract idea, as the dependent claims merely narrow the scope of their parent claims. For example, the dependent claims further describe what the notification will be such as a text message. In addition, the dependent claims further describe how the confidence rating is updated as product interest is increased or decreased.

Regarding step 2B the claims do not include additional elements that are sufficient to amount to significantly more than the judicial exception because claim 1 recites

- Method, however method is not considered an additional element.
- Claim 1 and 11 further states computing device.
- Claim 11 state non-transitory machine readable storage device.
- Claim 2 and 12 state cache

- Claim 6 and 16 state digital display.
- When looking at these additional elements individually, the additional elements are purely functional and generic, the applicant specifications states general purpose computer as seen in para 0024.
- When looking at the additional elements in combination, the applicant's specification merely states a general purpose computer as seen in para 0024.

The computer components add nothing that is not already present when the steps are considered separately. See MPEP 2106.05

Looking at these limitations as an ordered combination and individually adds nothing additional that is sufficient to amount to significantly more than the recited abstract idea because they simply provide instructions to use generic computer components, recitations of generic computer structure to perform generic computer functions that are used to "apply" the recited abstract idea. Thus, the elements of the claims, considered both individually and as an ordered combination, are not sufficient to ensure that the claim as a whole amounts to significantly more than the abstract idea itself. Since there are no limitations in these claims that transform the exception into a patent eligible application such that these claims amount to significantly more than the exception itself, claims 1-20 are rejected under 35 U.S.C. 101 as being directed to non-statutory subject matter.

Claim Rejections - 35 USC § 103

In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

- **Claim(s) 1, 2, 4, 5, 6, 9-12, 14, 15, 16, 19, and 20 is/are rejected under 35 U.S.C. 103 as being unpatentable over Alon (US20140143655A1) in further view of Demsey (US20190199774A1) in further view of Jaffri (US20100323716A1) in further view of Siliski (US20130151645A1).**
- **Regarding claim 1 and similarly claim 11, Alon teaches**
 - A method comprising (See abstract-The present invention discloses a method for providing adjusted content in a webpage in a website.)

- receiving first anonymous data associated with a first browser session initialized by a user via a browser on a user computing device (See para 0048-

According to some embodiments of the present invention, visitor communication device 105 in FIG. 1 of a viewer (i.e. visitor) that is navigating in the monitored website may be tracked to identify various parameters (stage 220)) This shows visitors are tracked when they browsing website on a device. This is anonymous data since the visitors are anonymous. (See para 0030-The present invention aims for statistically analyzing the behavior of anonymous visitors that are navigating in an Internet website based on their: content usage (selecting specific content to view or downloading content from the website navigational behavior (visits, clicks, selection URL), association to an organization, social network, history (number of visits), geo location, or industry.) The visitors are also using a browser to access the websites since you need a web browser to access sites such as bing and google (See para 0048-For example, search engines like Google and Bing).

- wherein the first anonymous data comprises one or more of a time, a date, one or more uniform resource locators (URLs), a referring URL, a browser type, a language, an internet protocol (IP) address, or location data (See para 0030-The present invention aims for statistically analyzing the behavior of anonymous visitors that are navigating in an Internet website based on their: content usage (selecting specific content to view or downloading content from the website navigational behavior (visits, clicks, selection URL), association to an

organization, social network, history (number of visits), geo location, or industry.)

This shows data comprised certain parameters such as location (i.e. geolocation) and URLS.

- determining that the user has not been assigned a unique identifier based on a lack of stored location data for the user computing device Examiner

interprets unique identifier as any parameter that identifies a user/visitor such as their industry. The system determines that the user/visitor has not been assigned a unique identifier because the system is dealing with anonymous website visitors who haven't been identified nor have any profile data stored in the data as seen in item 115 in figure 1. (See para 0003-It is the object of the present invention to detect anonymous visitors)(See para 0028-The term "anonymous profile" as used herein in this application, is defined as a viewer of a website that didn't identify by login process to the website.). The profile data includes location data since it is based on collected data from the tracking module. (See figure 2, 3, and para 0030).

- assigning the unique identifier to the user The system assigns unique identifier to the anonymous visitor such as what industry they belong too (See para 0053- According to some embodiments of the present invention, the monitored behavior may be analyzed (stage 340) and industry of the visitor may be identified (stage 350).)

- identifying a physical address for the user identifying a physical address for the user based on the determined latitude coordinate and the determined

longitude coordinate... The system determines physical addresses. Examiner interprets physical address to be the geo location of the user. (See para 0074- Tracking in real time visitors activities (step 905) and analyzing in real time visitor activities for identifying type of identified parameters (knowledge level): first level including only navigation path, geo location and) Geo location is based on GPS coordinates of a user. The coordinates correspond to longitude and latitude coordinates.

- associating the unique identifier to the physical address The system associates the unique identifier and physical address of the user/visitor by way of generating a profile for the user. (See para 0012- According to some embodiments of the present invention the method further comprises the step of generating visitor anonymous profile based on analyzed behavior and group classification according visitor's attributes, such as Geo location, industry and organization association.)
- generating a user profile for the user using the unique identifier and physical address. (See para 0012- According to some embodiments of the present invention the method further comprises the step of generating visitor anonymous profile based on analyzed behavior and group classification according visitor's attributes, such as Geo location, industry and organization association.)
- the user profile comprising profile information that comprises one or more URLs the user has accessed, the frequency with which the user accessed the

URL(s), demographics associated with the user, the address(es) associated with the user, or the devices associated with the user (See figure 3) This shows the profile is based on the collected data of the user. The collected data includes URLs the user has accessed. (See para 0030-The present invention aims for statistically analyzing the behavior of anonymous visitors that are navigating in an Internet website based on their: content usage (selecting specific content to view or downloading content from the website navigational behavior (visits, clicks, selection URL), association to an organization, social network, history (number of visits), geo location, or industry.)

- updating the profile information based on second anonymous data associated with a second browser session initialized on the user computing device or another user computing device associated with the physical address (See para 007-The visitors' profiles and behavior may change over time; therefore accordingly the group clustering has to be adapted to reflect the change. The present invention provides dynamic model by continuously analyzing statistically visitors' profile and behavior in comparison to the group clustering definition and identifying when statistically the amount of exceptional visitors has exceeded a predefined level.) This shows the profiles are updated because they change overtime. Examiner interprets the change due to multiple browsing sessions for the visitors on the device which includes a second browsing session. The art teaches second browsing sessions as seen here (See para 0033-For example, on his second visit to a website anonymous visitor)

- determining, using the updated profile information, a confidence rating for the user, quantifiable measure of the user's interest in a product (See para 007-

The visitors' profiles and behavior may change over time; therefore accordingly the group clustering has to be adapted to reflect the change. The present invention provides dynamic model by continuously analyzing statistically visitors' profile and behavior in comparison to the group clustering definition and identifying when statistically the amount of exceptional visitors has exceeded a predefined level.) (See para 0059-Finally, clustering module 120 in FIG. 1 may cluster visitors by generation of groups using analysis of statistics of the results of all checks and identifications as mentioned above (step 440): clicks, visit, geo location revenue, organization size (optionally navigation path, origin, social/organization/industry, association, history (number of visits), geo location, search terms, visitor's behavior including navigation path, selections, keyword used in information searches, and visitor feedback. The classification process may find correlation between the different parameters which characterize the visitor profile and its behavior for identifying groups of visitors which their characteristics indicate of at least one common interest or common behavior, such that the same content may be targeted to most visitors of the group.) The confidence rating corresponds to the group clustering and this will show a quantifiable measure of interest in a product. For example if visitors visit a bike website a have a large quantity of clicks on a bike website then the system will determine interest in the product of bikes and group those visitors together.

- generating one or more notifications based on one or more of the updated profile information or the confidence rating; and determining when to send the one or more notifications to the user. (See para 0075-At the next stages the module selects content for replacement and/or recommended content to be added to the website according to one of the following options: content scoring and/or group clustering, probability tree or nearest neighbor grouping (step 940).) The notifications correspond to displaying content for the visitors which is based on the confidence rating which is group clustering. This system also determines when to send the notification by determining to send in real time (See para 0075- Optionally content is selected by using the retrieved the rules. For replacing or adding the content the modules parses the webpage in real time to specify part of the webpage where the content will be presented (step 950). Once identifying the location of the content to be replaced in the website, the module replaces in real time the content in the web page to be presented for the specific visitor according to the selected content in a specified part of the webpage (step 960))
- Even though Alon teaches a system and computer device, it doesn't state computer readable medium, However Demsey teaches A non-transitory, machine-readable storage device that includes instructions that, when executed by a computing device, cause the computing device to (See para 0043- Such systems, devices and software code (e.g., as provided on a non-transitory computer readable medium, e.g., non-volatile memory, volatile memory, a hard

drive (e.g., solid state drive), computer disk, etc.) are also exemplary embodiments this invention.)

- Even though Alon teaches location tracking by geo location, it does not teach opting in or opting out, However Demsey teaches
 - 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 (See para 0048- In step 206, web server 130 hosting the web page 132 may determine if the mobile device 110 has opted out of allowing use of a DID 117 of the mobile device 110. For example, the web server 130 may review HTTP cookies stored in a cache of the web browser 116 to determine if an "opt-out" cookie has been stored therein, indicating an opt-out selection by the user of the mobile device 110.) This shows the system determines an opt-out selection based on whether the opt out cookie (i.e. location tracker) is installed on the computing device.
 - Even though Alon teaches unique identifier and caching repository it does not teach storing in local browser cache. However Demsey teaches
 - 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 (See para 0048- For example, the web server 130 may review HTTP cookies stored in a cache of the web browser 116 to determine if an "opt-out" cookie has been stored therein, indicating an opt-out selection by the user of the

mobile device **110**. In addition, or alternatively, the web page **132** may provide an opt-out link associated with a displayed opt-out “button” displayed on the mobile device display by the web browser **116**, where selection of the opt-out button (e.g., a touch input or mouse click) causes an opt-out request to be sent to identity server **140**. If such an opt-out selection (e.g., opt-out cookie or opt-out request) is detected, the method proceeds to step **208** where any cleanup actions that may be needed are performed. The method may be terminated after step **208**.) This shows if an opt-out selection the opt-out cookie is stored. The art teaches cookies stored in local browser cache of the device. (See para 0038- For example, web browser applications **116** may accept and store “cookies” on a cache of the web browser **116** (or similar information in a LocalStorage cache of the web browser **116**) as bits of data that may later be retrieved and analyzed in later communications with the same or other web servers **130**. Cookies may include first party cookies (1P cookies) that identify a web site and/or particular web page **132** that the web browser **116** has accessed. Cookies may also include third party cookies (3P cookies) that identify third party content provided by browsing a website but are not stored or content provided directly from the web site. For example, many advertisements are provided through accessing a web page **132**, the content of which is provided from a third party, such as via ad server **150**. If supported by a web browser, a such a third party cookie may be stored in the cache of the web browser to identify that the web browser of a user’s device has been provided with a particular advertisement.)

- Alon and Demsey are analogous art because they are from the same problem solving area of website tracking and both belong to G06Q30. It would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to have combined Alon's invention by incorporating the method of Demsey because Alon can also incorporate anonymous users opting in or out of tracking, this would give a level of privacy to the anonymous website visitors. In addition, Alon could also store items in browser caches if the anonymous users opted out. This would make the system of Alon more secure. In addition, Alon could use the advertisement system of Demsey to render content on the anonymous visitor's webpage that are relevant to the visitors.

- In addition, Alon further teaches determining a latitude coordinate and a longitude coordinate of the user computing device, during the first browser session, wherein the latitude coordinate and longitude coordinate are determined based on the anonymous data The art determines geo location which includes longitude and latitude coordinates based on the user going through websites and this is based on anonymous data since the website visitor/user is anonymous.
(See para 0030- The present invention aims for statistically analyzing the behavior of anonymous visitors that are navigating in an Internet website based on their: content usage (selecting specific content to view or downloading content from the website navigational behavior (visits, clicks, selection URL), association to an organization, social network, history (number of visits), geo location,)

- However Alon doesn't teach this is done upon determining the user opted out, however Jaffri teaches upon determining that the user opted-out of location tracking (See para 0041- In some examples, mobile client user consent may be requested at the mobile client in the form of a graphical user interface whereby a user can opt-in, or opt-out of the system, responsive to sending of the mobile client location request at 204. If a mobile client user denies consent, the ad delivery service may not be able to send location-targeted ads to the associated mobile client. However, at 206, the method 200 may include sending a mobile client user consent from the mobile client to the location broker service. Thus, the method 200 may include receiving the mobile client user consent at the location broker service from the mobile client at 208, and proceeding to step 210.) (See figure 2A) This shows that determining the user opted out, the location determination is still sent and Jaffri also deals with latitude and longitude as seen in para 0020.
- Alon and Jaffri are analogous art because they are from the same problem solving area of website tracking and both belong to G06Q30. It would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to have combined Alon's invention by incorporating the method of Jaffri because Alon can also incorporate anonymous users opting in or out of tracking, this would give a level of privacy to the anonymous website visitors. In addition, Alon could use the advertisement system of Jaffri to render content on the anonymous visitor's webpage that are relevant to the visitors such as ads and deals.

- In addition, Alon further teaches and wherein the latitude coordinate and the longitude coordinate are determined based on geo-location data retrieved from the user computing device (See para 0030- The present invention aims for statistically analyzing the behavior of anonymous visitors that are navigating in an Internet website based on their: content usage (selecting specific content to view or downloading content from the website navigational behavior (visits, clicks, selection URL), association to an organization, social network, history (number of visits), geo location,)(See figure 2) The mere fact that the art teaches geo location means that latitude and longitude are determined since an example of geolocation would be GPS coordinates such as 40.7 degrees north (latitude), 74 degrees west (longitude).
- However Alon doesn't teach this is done upon determining the user opted in, however Jaffri teaches upon determining that the user opted-in to location tracking; (See para 0019- Thus, the location broker service 112 may receive a mobile client user consent 132 from the mobile client 106, whereby the mobile client 106 can "opt-in" to the advertising system 100.)(See para 0041- In some examples, mobile client user consent may be requested at the mobile client in the form of a graphical user interface whereby a user can opt-in, or opt-out of the system) (See figure 2a) This shows the user opted in to location tracking and sending data to the location broker.
- Alon and Jaffri are analogous art because they are from the same problem solving area of website tracking and both belong to G06Q30. It would have been

obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to have combined Alon's invention by incorporating the method of Jaffri because Alon can also incorporate anonymous users opting in or out of tracking, this would give a level of privacy to the anonymous website visitors. In addition, Alon could use the advertisement system of Jaffri to render content on the anonymous visitor's webpage that are relevant to the visitors such as ads and deals.

- Even though Alon teaches determining physical address, it does not teach map API, However Siliski teaches
- using a map application programming interface (API) (See para 0055- For example, if the computing device 501 is used to implement a mapping application 518 having an API 519) This shows a map API.
- Alon and Siliski are analogous art because they are from the same problem solving area of user tracking. It would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to have combined Alon's invention by incorporating the method of Siliski because Alon would also be able to use a map API to determine location information for the anonymous users. The map API would help the user of Alon see location data concisely on a map and would help determine other characteristics of the user with respect to location such as what part of the country/world must anonymous users are visiting from.
- **Regarding claim 2 and similarly claim 12, Alon further teaches**

- determining that the user accessed a URL during the first browser session

The art teaches multiple browser sessions which include the first browser session and the art also teaches accessing URL (See para 0030- The present invention aims for statistically analyzing the behavior of anonymous visitors that are navigating in an Internet website based on their: content usage (selecting specific content to view or downloading content from the website navigational behavior (visits, clicks, selection URL),)

- and recognizing a second visit to the URL during the second browser session using the unique identifier The art teaches second browser sessions and visiting URL second time (See para 0033- For example, on his second visit to a website anonymous visitor sees a link to a white paper the visitor clicks on it and reads it, and fills out a form requesting more details thus becomes a business lead.) The anonymous visitor will also be using their unique identifier when browsing the web because the system determines their unique identifier (i.e. profile) such as what industry they belong too and the system gauges their unique identifier to make changes to profiles and make groups from their various browsing sessions. (See para 0030- The present invention aims for statistically analyzing the behavior of anonymous visitors that are navigating in an Internet website based on their: content usage (selecting specific content to view or downloading content from the website navigational behavior (visits, clicks,

selection URL), association to an organization, social network, history (number of visits), geo location, or industry.)

- Even though Alon teaches caching repository it doesn't teach stored in the local browser cache. The art teaches storage in local browser cache of the device. (See para 0038- For example, web browser applications 116 may accept and store "cookies" on a cache of the web browser 116 (or similar information in a LocalStorage cache of the web browser 116) as bits of data that may later be retrieved and analyzed in later communications with the same or other web servers 130. Cookies may include first party cookies (1P cookies) that identify a web site and/or particular web page 132 that the web browser 116 has accessed. Cookies may also include third party cookies (3P cookies) that identify third party content provided by browsing a website but are not stored or content provided directly from the web site. For example, many advertisements are provided through accessing a web page 132, the content of which is provided from a third party, such as via ad server 150. If supported by a web browser, a such a third party cookie may be stored in the cache of the web browser to identify that the web browser of a user's device has been provided with a particular advertisement.)
- Alon and Demsey are analogous art because they are from the same problem solving area of website tracking and both belong to G06Q30. It would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed

invention to have combined Alon's invention by incorporating the method of Demsey because Alon can also incorporate anonymous users opting in or out of tracking, this would give a level of privacy to the anonymous website visitors. In addition, Alon could also store items in browser caches if the anonymous users opted out. This would make the system of Alon more secure. In addition, Alon could use the advertisement system of Demsey to render content on the anonymous visitor's webpage that are relevant to the visitors.

- **Regarding claim 4 and similarly claim 14, Alon further teaches**
 - further comprising determining personal information associated with the user, the personal information comprising one or more of an address type, a name of the user, an age of the user, a gender of the user, demographics associated with the user, or psychographics associated with the user, wherein the personal information is used to generate the user profile and determine the confidence rating. The system determines personal information of the user such as address type (See para 0048- For example, a viewer coming from London and another viewer that is coming from New Delhi. (ii) identifying organization or private origin of the tracked viewer (stage 240); In other words, checking if the viewer is navigating from a workplace or from a residential place (iii) identifying social origin, of the tracked viewer, meaning checking if the visitor was referred

from a social website such as Facebook™ (stage 250); (iv) identifying origin of website that the visitor is coming from (stage 260) For example, search engines like Google and Bing; and (v) identifying and checking actions of visitors (i.e. viewers) in the monitored website (stage 270.) All this tracked data is used to generate user profiles as seen in fig. 3 and also used in group clustering (i.e. confidence level) (See para 0067- Finally, in case there is a specified amount of exceptional visitors that are not assigned to the group, a training process of clustering of profiles of visitors is reactivated (stage 540). The visitors' profiles and behavior may change over time; therefore accordingly the group clustering has to be adapted to reflect the change)

- **Regarding claim 5 and similarly claim 15, Alon further teaches**

- wherein the address type comprises one or more of a residential address, a single family home, an apartment building, or a commercial address, wherein when the address type is a residential address, the user profile is associated with the residential address such that information associated with the residential address is used to generate the user profile. The art teaches geo location which is a physical address, and the address can be residential as seen here (See para 0048- For example, a viewer coming from London and another viewer that is coming from New Delhi. (ii) identifying organization or private origin of the tracked viewer (stage 240); In other words, checking if the viewer is navigating

from a workplace or from a residential place (iii)) This collected data is used to generate the user profile as seen in figure 2 and 3.

- **Regarding claim 6 and similarly claim 16, Alon further teaches**

- wherein the one or more notifications comprise one or more of an email, a text message, a mobile phone notification, a phone call, or a digital display. The notification here is a content on a digital display of a website (See para 0004- The present invention provides a method for providing adjusted content in a webpage in a website.)

- **Regarding claim 9 and similarly claim 19, Alon further teaches**

- wherein the anonymous data comprises the latitude coordinate and the longitude coordinate. The art teaches latitude and longitude coordinates since the art teaches a geo location which comprises gps coordinates, an example of geolocation would be GPS coordinates such as 40.7 degrees north (latitude), 74 degrees west (longitude). (See para 0030- The present invention aims for statistically analyzing the behavior of anonymous visitors that are navigating in an Internet website based on their: content usage (selecting specific content to view or downloading content from the website navigational behavior (visits, clicks, selection URL), association to an organization, social network, history (number of visits), geo location)

- **Regarding claim 10 and similarly claim 20, Demsey further teaches**
 - wherein the location tracker is stored in a folder associated with the browser (See para 0038- The cache of the browser may be a folder created and/or accessible by the web browser 116 in which the cookies are stored, such as a “profile folder” “local settings” folder or a “user data” folder (name and location of such a folder being determined by different types of web browsers 116).) This shows the location tracker (i.e. cookie) are stored in a folder of the browser.
- Alon and Demsey are analogous art because they are from the same problem solving area of website tracking and both belong to G06Q30. It would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to have combined Alon’s invention by incorporating the method of Demsey because Alon can also incorporate anonymous users opting in or out of tracking, this would give a level of privacy to the anonymous website visitors. In addition, Alon could also store items in browser caches if the anonymous users opted out. This would make the system of Alon more secure. In addition, Alon could use the advertisement system of Demsey to render content on the anonymous visitor’s webpage that are relevant to the visitors.

- **Claim(s) 3 and 13 is/are rejected under 35 U.S.C. 103 as being unpatentable over Alon (US20140143655A1) in further view of Demsey (US20190199774A1) in further view of Jaffri (US20100323716A1) in further view of Siliski (US20130151645A1) in further view of Silver (US8935797B1)**

- **Regarding claim 3 and similarly claim 13, Alon, Demsey, Jaffri, and Siliski teach the limitations of claim 1, and 11, however they do not teach**
 - installing, upon determining that the user opted-in to location tracking, the location tracker in the browser.

 - Alon teaches browser and location tracking, but it doesn't teach installing location tracker (i.e. cookie).

 - However Silver teaches installing, upon determining that the user opted-in to location tracking, the location tracker in the browser (See col. - Each time the customer 122 logs into web services 118, a check is performed to determine whether the tracking cookie exists on the particular computing device that customer 122 is accessing/navigating card issuer web services 118 through. If the cookie does not exist, then the tracking cookie containing the unique online user ID (non-PII) and indicating the opt-in/opt-out selection is downloaded to that computing device by card issuer web services 118) This shows a cookie is downloaded based on the user opting in.

- Alon and Silver are analogous art because they are from the same problem solving area of anonymous data and both belong to G06Q30. It would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to have combined Alon's invention by incorporating the method of Silver because Alon can also incorporate protecting the privacy of the anonymous visitors to the website. Alon can incorporate an opting in and opting out check to the anonymous visitors. Alon would also be able to not only look at anonymous visitor visitation data but also their transaction history to better gauge their interests and provide relevant content to their webpages.

- **Claim(s) 7, 8, 17, and 18 is/are rejected under 35 U.S.C. 103 as being unpatentable over Alon (US20140143655A1) in further view of Demsey (US20190199774A1) in further view of Jaffri (US20100323716A1) in further view of Siliski (US20130151645A1) in further view of Siroker (US20200233911A1)**

- **Regarding claim 7 and similarly claim 17, Alon, Demsey, Jaffri, and Siliski teach the limitations of claim 1, and 11, however they do not teach**

- determining a specific product of interest based on the URLs that the user visited
- and generating the one or more notifications based on the specific product of interest.

- However Siroker teaches determining a specific product of interest based on the URLs that the user visited (See para 0045- In embodiments, the audience identification component 125 may maintain multiple interest scores for different audience categories. For example, a user may have a first interest score for furniture and a second interest score for kitchen supplies. If the user initially visits several sofa product pages, the first interest score for furniture may increase, while the second interest score for kitchen supplies may decrease.) This shows interest for product that the user visited on a website.
- and generating the one or more notifications based on the specific product of interest. The notifications here are the variant webpages with advertisements (See para 0083- At block 1540, the processing logic causes the variant of the web page to be presented at a subset of client devices associated with the subset of users. In embodiments, the processing logic may cause the variant of the web page to be presented by transmitting a command to client-side agents (e.g., client-side agent 121 of FIG. 1) on the subset of client devices, where the command causes the client-side agents to present the variant of the web page.)
- Alon and Siroker are analogous art because they are from the same problem solving area of user/visitor interest and both belong to G06Q30. It would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to have combined Alon's invention by incorporating the method of Siroker because Alon can also incorporate the system of Siroker to modify the webpages. Alon

would be able to make target audiences and determine keywords with the target audiences when determining how to make the variant webpages. This would give the system of Alon more data regarding the users and would be able to better gauge user interests so more relevant web content is given to them.

- **Regarding claim 8 and similarly claim 18, Alon, Demsey, Jaffri, and Siliski teach the limitations of claim 1, and 11, however they do not teach**

- further comprising updating the determined confidence rating upon subsequent visits to the specific URL to indicate an increase in the user's interest in the product.

- However Siroker teaches further comprising updating the determined confidence rating upon subsequent visits to the specific URL to indicate an increase in the user's interest in the product. (See para 0045- In embodiments, the audience identification component 125 may maintain multiple interest scores for different audience categories. For example, a user may have a first interest score for furniture and a second interest score for kitchen supplies. If the user initially visits several sofa product pages, the first interest score for furniture may increase, while the second interest store for kitchen supplies may decrease. However, if the user then views several pages for kitchen appliances, the first interest score for furniture may decrease, while the second interest score

for kitchen supplies may increase.) This shows a score is updated based on visits to a webpage. Alon already teaches confidence rating.

- Alon and Siroker are analogous art because they are from the same problem solving area of user/visitor interest and both belong to G06Q30. It would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to have combined Alon's invention by incorporating the method of Siroker because Alon can also incorporate the system of Siroker to modify the webpages. Alon would be able to make target audiences and determine keywords with the target audiences when determining how to make the variant webpages. This would give the system of Alon more data regarding the users and would be able to better gauge user interests so more relevant web content is given to them.

Conclusion

The prior art made of record and not relied upon considered pertinent to Applicant's disclosure.

Ulrich (US20170064032A1) Discloses a technique for identifying an opt-out status for a user's mobile or other computing device without relying exclusively on client-side storage or primarily on the use of non-determinative mechanisms is discussed.

Rao (US20200386565A1) Discloses a method, computer system, and a computer program product for predicting one or more travel paths for one or more mobile assets is provided.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MUSTAFA IQBAL whose telephone number is (469)295-9241. The examiner can normally be reached Monday Thru Friday 9:30am-7:30 CST.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at <http://www.uspto.gov/interviewpractice>.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Stamber can be reached on 5712726724. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of published or unpublished applications may be obtained from Patent Center. Unpublished application information in Patent Center is available to registered users. To file and manage patent submissions in Patent Center, visit: <https://patentcenter.uspto.gov>. Visit <https://www.uspto.gov/patents/apply/patent-center> for more information about Patent Center and <https://www.uspto.gov/patents/docx> for information about filing in DOCX format. For additional questions, contact the Electronic Business Center (EBC) at 866-217-9197

Art Unit: 3683

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/MUSTAFA IQBAL/

Examiner, Art Unit 3683

<i>Notice of References Cited</i>	Application/Control No. 17/687,992		Applicant(s)/Patent Under Reexamination Waishampayan et al.	
	Examiner MUSTAFA IQBAL		Art Unit 3683	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-20140143655-A1	05-2014	ALON; Mickey	G06N7/005	715/234
*	B	US-20190199774-A1	06-2019	Demsey; Seth	G06Q30/0267	1/1
*	C	US-20100323716-A1	12-2010	Jaffri; Taqi	H04W4/20	705/14.58
*	D	US-20130151645-A1	06-2013	Siliski; Michael	G06F16/27	709/213
*	E	US-8935797-B1	01-2015	Silver; Wendy	G06F21/6245	726/26
*	F	US-20200233911-A1	07-2020	Siroker; Dan	H04L67/306	1/1
*	G	US-20170064032-A1	03-2017	Ulrich; David	H04L67/02	1/1
*	H	US-20200386565-A1	12-2020	Rao; Rajendra	G01C21/10	1/1
	I					
	J					
	K					
	L					
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FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Search Notes 	Application/Control No. 17/687,992	Applicant(s)/Patent Under Reexamination Waishampayan et al.
	Examiner MUSTAFA IQBAL	Art Unit 3683

CPC - Searched*		
Symbol	Date	Examiner
G06Q30/\$.cpc.	06/08/2022	MI

CPC Combination Sets - Searched*		
Symbol	Date	Examiner

US Classification - Searched*			
Class	Subclass	Date	Examiner

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

Search Notes		
Search Notes	Date	Examiner
NPL search was done.	06/08/2022	MI
Search was done. Please see attached Search	06/08/2022	MI

Interference Search			
US Class/CPC Symbol	US Subclass/CPC Group	Date	Examiner

/MUSTAFA IQBAL/ Examiner, Art Unit 3683	
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<i>Index of Claims</i> 	Application/Control No. 17/687,992	Applicant(s)/Patent Under Reexamination Waishampayan et al.
	Examiner MUSTAFA IQBAL	Art Unit 3683

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

CLAIMS										
☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47										
CLAIM		DATE								
Final	Original	06/08/2022								
	1	✓								
	2	✓								
	3	✓								
	4	✓								
	5	✓								
	6	✓								
	7	✓								
	8	✓								
	9	✓								
	10	✓								
	11	✓								
	12	✓								
	13	✓								
	14	✓								
	15	✓								
	16	✓								
	17	✓								
	18	✓								
	19	✓								
	20	✓								

Bibliographic Data

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Foreign Priority claimed: ☐ Yes ☒ No

35 USC 119 (a-d) conditions met: ☐ Yes ☒ No ☐ Met After Allowance

Verified and Acknowledged: /MUSTAFA IQBAL/

Examiner's Signature

Initials

Title:

LOCATION DETERMINATION USING ANONYMOUS
BROWSER DATA

FILING or 371(c) DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
03/07/2022	705	3683	FLTH_0002
RULE			

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Alexey Yakovlev, Dnipro, UKRAINE

CONTINUING DATA

This application has PRO of 63208275 06/08/2021

FOREIGN APPLICATIONS

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03/09/2022

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PE2E SEARCH - Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	British Equivalents	Time Stamp
L1	2488	(web webpage website site) WITH (traffic\$4 visit\$4) WITH (anonym\$6)	(US-PGPUB; USPAT; USOCR; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, SE, SG, SI, SK, TH, TN, TR, TW, UA, VN); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2022/06/01 06:37 PM
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L25	33	("opt-in") WITH (track\$4) WITH (cookie\$4)	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, OA, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2022/06/02 07:20 PM
L26	0	("opt-in") WITH (track\$4) WITH (cookie\$4) WITH (folder near10 browser)	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS,	OR	ON	ON	2022/06/02 07:45 PM

L27	0	("opt-in") WITH (cookie\$4) WITH (folder near10 browser)	IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, OA, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB) (US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, OA, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2022/06/02 07:45 PM
L28	196	(cookie\$4) WITH (folder near10 browser) WITH (stor\$6)	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, OA, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2022/06/02 07:45 PM
L29	37	(cookie\$4) WITH (folder near10 browser) WITH (stor\$6) AND G06Q30/\$.cpc.	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, OA, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2022/06/02 07:46 PM

L30	26	(cookie\$4) WITH (folder near10 browser) WITH (stor\$6) AND G06Q30/\$.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2022/06/02 07:46 PM
L31	330	(product good) WITH (interest\$4) WITH (URL visit\$4) WITH (notification notif\$5 advertisement ad) AND G06Q30/\$.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2022/06/02 08:04 PM
L32	91	(increas\$4) WITH (interest\$4) WITH (URL visit\$4) WITH (product good service) AND G06Q30/\$.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2022/06/02 08:12 PM
L33	0	((("FullThrottle") near3 ("Technologies") near3 ("LLC"))).AS,AANM.	(USPAT)	OR	ON	ON	2022/06/08 05:02 PM
L34	0	((("FullThrottle") near3 ("Technologies") near3 ("LLC"))).AS,AANM.	(US-PGPUB; USPAT; USOCR; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, SE, SG, SI, SK, TH, TN, TR, TW, UA, VN); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2022/06/08 05:02 PM
L35	1	((("WAISHAMPAYAN") near3 ("Amol")) OR ((("O'FLAHERTY") near3 ("Pat")) OR ((("YAKOVLEV") near3 ("Alexey"))).INV.	(US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT)	OR	ON	ON	2022/06/08 05:02 PM

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There are no Interference searches to show.



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- [HTML] Shopping without purchase: An investigation of **consumer browsing behavior** [HTML] acrwebsite.org
P.H.Bloch, M.L.Richins - ACR North American Advances, 1983 - acrwebsite.org
... aspect of non-purchase **consumer behavior**-browsing. Most of us at ... **Browsers** were found to have higher **interest** in and knowledge of the product class concerned than do non-**browsers**...
Save Cite Cited by 504 Related articles All 4 versions
- Extending the concept of shopping: An investigation of **browsing activity** [PDF] springer.com
P.H.Bloch, N.M.Ridgway, D.L.Sherrell - Journal of the Academy of Marketing ... , 1989 - Springer
... In many previous studies of **consumer behavior**, shopping has been equated with ... **browsers**, remain a less wellknown element in the retail environment. **Browsers** warrant the **interest** of ...
Save Cite Cited by 412 Related articles All 4 versions
- Behavioral targeting: A case study of **consumer tracking** on levis. com [PDF] ftc.gov
C.A.Dwyer - Available at SSRN 1508496, 2009 - papers.ssrn.com
... to track and aggregate **consumer behavior**. The vast majority of ... the **consumer** has not been identified by name, her **interest** ... For example, we collect your IP address, **browser** information ...
Save Cite Cited by 50 Related articles All 10 versions
- [HTML] The impact of web site image and **consumer personality** on **consumer behavior** [HTML] proquest.com
C.Wen-Jung, C.Lee - International Journal of Management, 2005 - search.proquest.com
... to attract the **consumer's** attention, cause their **interest**, arouse their ... of **browsers** toward Internet marketing and circumstances should be reduced. It was found in this study that **browsers** ...
Save Cite Cited by 56 Related articles
- [HTML] Analyzing online **consumer behavior** in mobile and PC devices: A novel web usage mining approach [HTML] sciencedirect.com
Q.Raghaeei, A.Goldstein, L.Fink - Electronic commerce research and ... , 2017 - Elsevier
... the **browser's** expertise in the product category of **interest**. Such information-seeking **browsers** tend to be driven by task shopping motives. Conversely, recreational **browsers** tend to be ...
Save Cite Cited by 93 Related articles All 4 versions
- Web content recommender system based on **consumer behavior modeling** [PDF] ieee.org
ACM.Feng, B.Zhou, S.Q.Hui, Q.Y.Hong... - ... on Consumer ... , 2011 - ieeeexplore.ieee.org
... In the current Web environment, web usage logs (including the web server logs, **browser** ... This makes it difficult to be used for understanding users' actual access **behaviors**, **interests** ...
Save Cite Cited by 62 Related articles All 3 versions
- [HTML] A behavioral analysis of web sharers and **browsers** in Hong Kong using targeted association rule mining [HTML] sciencedirect.com
J.Rena, H.Q.Yu, R.Law, Q.Li - Tourism Management, 2012 - Elsevier
... it affects **consumer behavior**. ► We ... **consumer behavior**, and identified the factors that can directly influence the effect of eWOM. Among those factors, we focus on sharers and **browsers** ...
Save Cite Cited by 135 Related articles All 13 versions

[HTML] Predictors of online consumer behavior
NV Vachhani, S Bhayani - Journal of Commerce and ..., 2012 -
search.proquest.com

[HTML] proquest.com
Full View

... Based on their varied **interests**, they define their goal of ... **browser**, internet speed, Wi-Fi etc.
Ultimately, B2C Model – ... affect **consumer** psychographics and **consumer interest** in buying ...
Save Cite Cited by 8 Related articles All 3 versions

Consumer behavior in web-based commerce: an empirical
study

Full Text @ USPTO-STIC

M Koufaris, A Kambil, PA LaBarbera - International journal of ..., 2001 - Taylor & Francis
... , and the user-friendliness of the Web **browser** gives Web consumers considerable power [4.
... links, and incomplete checkout processes are not of **interest** in this study. It will look at how ...
Save Cite Cited by 730 Related articles All 5 versions

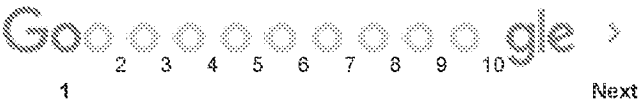
Browsers or buyers in cyberspace? An investigation of factors
influencing electronic exchange

[HTML] oup.com

V Swaminathan, E Lepkowska-White... - Journal of computer ..., 1999 - academic.oup.com
... **consumer behavior** has been established in the past and may be a primary factor influencing
the conversion of **browsers** ... focal construct of **interest** influenced by **consumer** and vendor ...
Save Cite Cited by 925 Related articles All 5 versions

Related searches

- online consumer behavior
- consumer behavior modeling
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- purchase decisions consumer behavior
- empirical study consumer behavior
- internet behavior consumers in india
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Behavioral targeting: A case study of consumer tracking on levis. com

[PDF] ftc.gov

GA Dwyer - Available at SSRN 1508496, 2009 - papers.ssrn.com

... the **browsers** of web site visitors, using these tags to **track** and aggregate **consumer behavior**...

Everything else collected about online browsing, including sensitive items such as **location** (...)

Save Cite Cited by 50 Related articles All 10 versions

[BOOK] Handbook of consumer behavior, tourism, and the Internet

JE Mills, R Law - 2004 - books.google.com

... ACADEMIC RESEARCHERS AND INDUSTRY PRACTITIONERS ALIKE WILL FIND A WEALTH OF INFORMATION about the state of e-**consumer behavior** research in one convenient ...

Save Cite Cited by 205 Related articles All 5 versions

Essay 4: Analyzing Consumer Behavior with Non-Tracking Event Data

C Kakatkar, M Spann - ... of Network Analysis in Marketing Science, 2018 - books.google.com

... to the **consumer** than another ... to **consumer tracking** already used in the between-store context discussed above (Sorensen et al., 2017). Whereas GPS and IP-based **location tracking** is ...

Save Cite Related articles All 2 versions

[PDF] Computer Internet

[PDF] weil.com

RW Singer, D Kieran - weil.com

... of its use of **tracking** cookies in Apple's Safari **browser**; at the ... Safari **browser** sued Google over the same secret **tracking** ... **consumer behavior** that can be created by **location tracking** is ...

Save Cite Related articles All 2 versions

[HTML] Internet of Things: Convenience vs. privacy and secrecy

[HTML] sciencedirect.com

BD Weinberg, GR Milne, YG Andonova, FM Hailat - Business Horizons, 2015 - Elsevier

Full Text @ USPTO-STIC

... and record data related to **consumer behavior** in the natural, ... **consumer** may use a laptop to shop online, direct a **browser** ... may communicate a **consumer's location** and estimated arrival ...

Save Cite Cited by 276 Related articles All 6 versions

[HTML] Analyzing online consumer behavior in mobile and PC devices: A novel web usage mining approach

[HTML] sciencedirect.com

Q Raphaelli, A Goldstein, L Fink - Electronic commerce research and ..., 2017 - Elsevier

Full Text @ USPTO-STIC

... the **browser's** expertise in the product category of interest. Such information-seeking **browsers** ... Clickstream data, which **trace** the path a visitor takes while navigating the web and enable ...

Save Cite Cited by 93 Related articles All 4 versions

Factors influencing consumer behavior and prospective purchase decisions in a dynamic pricing environment—An exploratory factor analysis approach

[PDF] mdpi.com

Y Victor, J Joy Thompson, R Jeyakumar Nathan ... - Social Sciences, 2018 - mdpi.com

Full View

... examine probable changes in **consumer behavior** when exposed to ... the factors that influence **consumer behavior**, and their ... **Tracking** the prices before purchase, using software to **track** ...

Save Cite Cited by 80 Related articles All 14 versions

[HTML] Hispanic online consumer demographics in New York City and its relationship to online consumer behavior

[HTML] proquest.com

J Izquierdo - 2018 - search.proquest.com

Full View

Launch Labs EX1002 Page 115

https://scholar.google.com/scholar?hl=en&as_sdt=0%2C47&q=browser+consumer+behavior+location+tracking&btnG=[6/8/2022 4:09:29 PM]

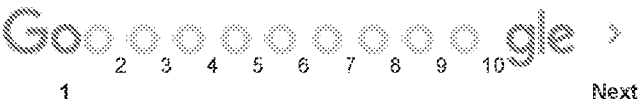
... of online purchase **behavior** through smartphone web **browsers**, ... **Location** may affect online **consumer behavior** because of ... **Location** is an important part of online **consumer** research, ...
Save Cite Cited by 1 Related articles

[PDF] Cross-Device Tracking: Measurement and Disclosures. [PDF] hillwebcreations.com
J Brookman, P Rouge, A Alva... - Proc. Priv. Enhancing ..., 2017 - hillwebcreations.com
... However, correlation of IP address and **location** does not necessarily guarantee that the ...
Our test **browsers** were frequently directed to the servers of probabilistic cross-devices **tracking** ...
Save Cite Cited by 93 Related articles All 3 versions

[HTML] Marketing analytics using anonymized and fragmented tracking data [HTML] sciencedirect.com
Full Text @ USPTO-STIC
C Kakatkar, M.Spain - International Journal of Research in Marketing, 2019 - Elsevier
... interesting patterns of **consumer behavior** and could be ... Similarly, the physical **location** of a **consumer**, as well as her ... giants like Google, while **browser** plugins such as AdBlocker and ...
Save Cite Cited by 32 Related articles All 7 versions

Related searches

- online consumer behavior
- dynamic pricing environment consumer behavior
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Online tracking: A 1-million-site measurement and analysis
[S.Englishanil](#), [A.Narayanan](#) - Proceedings of the 2016 ACM SIGSAC ... 2016 -
[dl.acm.org](#)

[PDF] [acm.org](#)
Full Text @ [USPTO-STIC](#)

... **browser** have the potential to miss a large number of resource loads. TrackingObserver is a Chrome extension that detects **track**... in a central and structured **location**. The data aggregator ...
Save Cite Cited by 680 Related articles All 23 versions

[HTML] **The digital future—A challenge for privacy?**

[HTML] [sciencedirect.com](#)
Full Text @ [USPTO-STIC](#)

[RH Weber](#) - Computer Law & Security Review, 2015 - Elsevier

... phone users have the **location tracking** functions turned off ... **browser** settings that disallow the **tracking** of browsing ... well as a change in **consumer behavior** and market demand for privacy...
Save Cite Cited by 54 Related articles All 5 versions

Implicit authentication through learning user behavior

[PDF] [markus-jakobsson.com](#)

[E.Shi](#), [Y.Niu](#), [M.Jakobsson](#), [R.Chow](#) - International Conference on ... 2010 - Springer

... **Browser** History: We pulled **browser** history and recorded the ... **Location**: We recorded the GPS coordinates if available, only ... good **browser** event for every event in the adversary's **trace**. ...
Save Cite Cited by 363 Related articles All 19 versions

[HTML] **The effect of behavioral tracking practices on consumers' shopping evaluations and repurchase intention toward trusted online retailers**

[HTML] [sciencedirect.com](#)
Full Text @ [USPTO-STIC](#)

[TMC Jai](#), [LD Burns](#), [NJ King](#) - Computers in Human Behavior, 2013 - Elsevier

... icons and do not **track browser** features and the implications ... of behavioral **tracking** practices impacts **consumer** behavioral ... With the emergence of real-time **location**-based technologies ...
Save Cite Cited by 86 Related articles All 7 versions

[HTML] **Quantifying health literacy and eHealth literacy using existing instruments and browser-based software for tracking online health information seeking behavior**

[HTML] [sciencedirect.com](#)
Full Text @ [USPTO-STIC](#)

[S Quinn](#), [R Bond](#), [C Nugent](#) - Computers in Human Behavior, 2017 - Elsevier

... Resource **Locator** (URL) directly into the address bar. The HCI **Browser** also provided an interface through which an answer could be submitted, and collected timestamped **browser** log ...
Save Cite Cited by 87 Related articles All 7 versions

Frontiers: The impact of ad-blockers on online consumer behavior

[V.Todri](#) - Marketing Science, 2022 - pubsonline.informs.org

... Digital advertising is on **track** to become the dominant form of ... free-to-use third-party internet **browser** extension—that can prevent ... zip code **location** during the observation window of the ...
Save Cite Cited by 5 Related articles

[HTML] **Location-based services, conspicuous mobility, and the location-aware future**

[HTML] [sciencedirect.com](#)
Full Text @ [USPTO-STIC](#)

[MW Wilson](#) - Geoforum, 2012 - Elsevier

... technological accomplishments of **location tracking** and web ... ways in which check-ins might change **consumer behavior**. ... but also available on a computer **browser**, connects the user to ...
Save Cite Cited by 220 Related articles All 8 versions

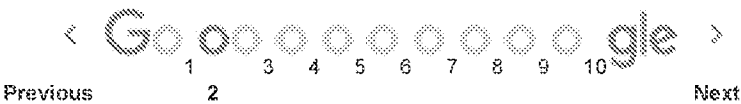
[PDF] **Marketing Information Systems.**

[PDF] [researchgate.net](#)

RR Harmon - 2002 - researchgate.net
... **consumer behavior** to a fixed **location** ... **track** the user's **behavior** on the site. Most Web users are not knowledgeable about cookies. If a **consumer** removes the cookies from the **browser** ...
Save Cite Cited by 32 Related articles

[HTML] Eye **tracking** technology to audit google analytics: [HTML] sciencedirect.com
Analysing digital **consumer** shopping journey in fashion m- Full Text @ USPTO-STIC
retail
Z.Tupikovskaja-Omovic, D Tyler - International Journal of Information 2021 - Elsevier
... analytics for new **consumer behaviours** such as m-commerce. ... distinct Client IDs for different **browsers**. Since retailers have ... be used to **track** the same user across multiple **browsers** with ...
Save Cite Cited by 10 Related articles All 3 versions

[book] Behind the one-way mirror: a deep dive into the [PDF] cag.edu.tr
technology of corporate surveillance
B Cyphers, G Gebhart - 2019 - cag.edu.tr
... **browsers** that work the same way desktop **browsers** do. That means that these types of connected devices are susceptible to all of the kinds of **tracking** ... information to **track** your **location** (...
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
17/687,992	03/07/2022	Amol Waishampayan	FLTH_0002	3742
54380	7590	05/10/2022	EXAMINER	
FLASTER/GREENBERG P.C.			CENTRAL, DOCKET	
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			OPAP	
			NOTIFICATION DATE	DELIVERY MODE
			05/10/2022	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

FGdocketing@flastergreenberg.com

USP@flastergreenberg.com

<i>Decision Granting Request for Prioritized Examination (Track I)</i>	Application No. 17/687,992	Applicant(s) Waishampayan et al.	
	Examiner JoAnne L Burke	Art Unit OPET	AIA (FITF) Status Yes
1. THE REQUEST FILED <u>07 March 2022</u> IS GRANTED . The above-identified application has met the requirements for prioritized examination A. ☒ for an original nonprovisional application (Track I). B. ☐ for an application undergoing continued examination (RCE). 2. The above-identified application will undergo prioritized examination. The application will be accorded special status throughout its entire course of prosecution until one of the following occurs: A. filing a <u>petition for extension of time</u> to extend the time period for filing a reply; B. filing an <u>amendment to amend the application to contain more than four independent claims, more than thirty total claims</u>, or a multiple dependent claim; C. filing a <u>request for continued examination</u> ; D. filing a notice of appeal; E. filing a request for suspension of action; F. mailing of a notice of allowance; G. mailing of a final Office action; H. completion of examination as defined in 37 CFR 41.102; or I. abandonment of the application. Telephone inquiries with regard to this decision should be directed to JoAnne Burke at (571)272-4584. In his/her absence, calls may be directed to Petition Help Desk at (571) 272-3282.			
/JOANNE L BURKE/ Lead Paralegal Specialist, OPET			



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APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	TOT CLAIMS	IND CLAIMS
17/687,992	03/07/2022	3661	910	FLTH_0002	20	2

54380
FLASTER/GREENBERG P.C.
1717 Arch Street
Suite 3300
Philadelphia, PA 19103

CONFIRMATION NO. 3742
UPDATED FILING RECEIPT



Date Mailed: 04/11/2022

Receipt is acknowledged of this non-provisional utility patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF FIRST INVENTOR, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection.

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Inventor(s)

Amol Waishampayan, Philadelphia, PA;
Pat O'Flaherty, Dublin, IRELAND;
Alexey Yakovlev, Dnipro, UKRAINE;

Applicant(s)

FullThrottle Technologies, LLC, Malvern, PA

Assignment For Published Patent Application

FullThrottle Technologies, LLC, Malvern, PA

Power of Attorney: The patent practitioners associated with Customer Number 54380

Domestic Priority data as claimed by applicant

This appln claims benefit of 63/208,275 06/08/2021

Foreign Applications for which priority is claimed (You may be eligible to benefit from the **Patent Prosecution Highway** program at the USPTO. Please see <http://www.uspto.gov> for more information.) - None.

Foreign application information must be provided in an Application Data Sheet in order to constitute a claim to foreign priority. See 37 CFR 1.55 and 1.76.

Permission to Access Application via Priority Document Exchange: Yes

Permission to Access Search Results: Yes

Applicant may provide or rescind an authorization for access using Form PTO/SB/39 or Form PTO/SB/69 as appropriate.

If Required, Foreign Filing License Granted: 03/09/2022

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 17/687,992**

Projected Publication Date: 12/08/2022

Non-Publication Request: No

Early Publication Request: No

**** SMALL ENTITY ****

Title

LOCATION DETERMINATION USING ANONYMOUS BROWSER DATA

Preliminary Class

701

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications: No

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Title 37, Code of Federal Regulations, 5.11 & 5.15

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The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

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technology, manufacture products, deliver services, and grow your business, visit <http://www.SelectUSA.gov> or call +1-202-482-6800.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875						Application or Docket Number 17/687,992				
APPLICATION AS FILED - PART I										
(Column 1)		(Column 2)		SMALL ENTITY		OR OTHER THAN SMALL ENTITY				
FOR	NUMBER FILED	NUMBER EXTRA	RATE(\$)	FEE(\$)		RATE(\$)	FEE(\$)			
BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	80		N/A				
SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A	N/A	350		N/A				
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	400		N/A				
TOTAL CLAIMS (37 CFR 1.16(j))	20	minus 20 = *	x 50 =	0.00	OR					
INDEPENDENT CLAIMS (37 CFR 1.16(h))	2	minus 3 = *	x 240 =	0.00						
APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			0.00						
MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				0.00						
			TOTAL	830		TOTAL				
* If the difference in column 1 is less than zero, enter "0" in column 2.										
APPLICATION AS AMENDED - PART II										
(Column 1)		(Column 2)		(Column 3)		SMALL ENTITY		OR OTHER THAN SMALL ENTITY		
AMENDMENT A		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE(\$)	ADDITIONAL FEE(\$)		RATE(\$)	ADDITIONAL FEE(\$)
	Total (37 CFR 1.16(i))	*	Minus	**	=	x	=	OR	x	=
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x	=	OR	x	=
	Application Size Fee (37 CFR 1.16(s))							OR		
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	
(Column 1)		(Column 2)		(Column 3)		SMALL ENTITY		OR OTHER THAN SMALL ENTITY		
AMENDMENT B		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE(\$)	ADDITIONAL FEE(\$)		RATE(\$)	ADDITIONAL FEE(\$)
	Total (37 CFR 1.16(i))	*	Minus	**	=	x	=	OR	x	=
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x	=	OR	x	=
	Application Size Fee (37 CFR 1.16(s))							OR		
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3. ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20". *** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3". The "Highest Number Previously Paid For" (Total or Independent) is the highest found in the appropriate box in column 1.										

DOCKET NO.: FLTH_0002

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

FullThrottle Technologies, LLC

Application No.: 17/687,992

Filing Date: March 7, 2022

For: LOCATION DETERMINATION USING ANONYMOUS BROWSER DATA

Confirmation No.: 3742

Group Art Unit: 3661

Examiner: Not Yet Assigned

VIA EFS

**RESPONSE TO NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL
APPLICATION FILED UNDER 37 CFR 1.53(b)**

In response to the Notice to File Missing Parts of Non-Provisional Application Filed Under 37 CFR 1.53(b) dated March 10, 2022, Applicant hereby submits the inventors' oath or declaration along with the late oath or declaration surcharge fee of \$80. The Commissioner is hereby authorized to charge any fee deficiency deemed necessary, charge any additional fees, or credit any overpayment of fees, associated with this application in connection with this filing, or any future filing, submitted to the U.S. Patent and Trademark Office during the pendency of this application, to Deposit Account No. 50-3541.

Date: April 7, 2022

/Ryan A. Peddle/

Ryan A. Peddle

Registration No. 77,970

Flaster Greenberg PC
1717 Arch Street, Suite 3300
Philadelphia, PA 19103
Telephone: (215) 279-9393
Facsimile: (215) 279-9394

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

Title of
Invention

LOCATION DETERMINATION USING ANONYMOUS BROWSER DATA

As the below named inventor, I hereby declare that:

This declaration is directed to: ☐ The attached application, or

☒ United States application or PCT international application number 17/687,992
filed on March 7, 2022.

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

WARNING:

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

LEGAL NAME OF INVENTOR

Inventor: Pat O'Flaherty Date (Optional): 03-16-2022

Signature: Pat O'Flaherty

Note: An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form or must have been previously filed. Use an additional PTO/AIA/01 form for each additional inventor.

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 1 minute to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
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6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
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9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Signature Certificate

Reference number: DJKT6-8UMMJ-UGTP7-NZZPD

Signer

Pat O'Flaherty

Email: pat.oflaherty@fullthrottle.ai

Sent:

Viewed:

Signed:

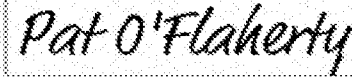
Timestamp

16 Mar 2022 15:06:19 UTC

16 Mar 2022 16:23:52 UTC

16 Mar 2022 16:28:51 UTC

Signature



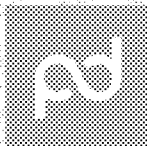
IP address: 93.115.37.62

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DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

Title of
Invention

LOCATION DETERMINATION USING ANONYMOUS BROWSER DATA

As the below named inventor, I hereby declare that:

This declaration is directed to: ☐ The attached application, or

☒ United States application or PCT international application number 17/687,992
filed on March 7, 2022.

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

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LEGAL NAME OF INVENTOR

Inventor: Amol Waishampayan Date (Optional): 03-18-2022

Signature: Amol Waishampayan

Note: An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form or must have been previously filed. Use an additional PTO/AIA/01 form for each additional inventor.

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If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Privacy Act Statement

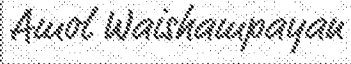
The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

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Signature Certificate

Reference number: UABMW-RYRKG-LMNEJ-KXDTX

Signer	Timestamp	Signature
Amol Waishampayan Email: amol@fullthrottle.ai		
Sent:	16 Mar 2022 15:10:33 UTC	
Viewed:	21 Mar 2022 15:24:38 UTC	IP address: 71.230.82.43
Signed:	21 Mar 2022 15:29:38 UTC	Location: Philadelphia, United States

Document completed by all parties on
21 Mar 2022 15:29:38 UTC

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DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

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Invention

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filed on March 7, 2022

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LEGAL NAME OF INVENTOR

Inventor: Alexey Yakovlev Date (Optional): 03-16-2022

Signature: Alexey Yakovlev

Note: An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form or must have been previously filed. Use an additional PTO/AIA/01 form for each additional inventor.

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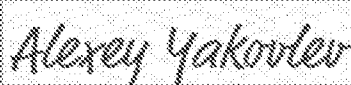
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Signature Certificate

Reference number: JHTYF-DOCKZ-ZOOVG-JQAHT

Signer	Timestamp	Signature
Alexey Yakovlev Email: alexey.yakovlev@fullthrottle.ai		
Sent:	16 Mar 2022 15:14:49 UTC	
Viewed:	16 Mar 2022 16:11:45 UTC	
Signed:	16 Mar 2022 16:12:58 UTC	IP address: 185.181.18.214 Location: Dnipro, Ukraine

Document completed by all parties on
16 Mar 2022 16:12:58 UTC

Page 1 of 1



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Electronic Patent Application Fee Transmittal

Application Number:	17687992			
Filing Date:	07-Mar-2022			
Title of Invention:	LOCATION DETERMINATION USING ANONYMOUS BROWSER DATA			
First Named Inventor/Applicant Name:	Amol Waishampayan			
Filer:	Ryan A. Peddle/Emily Tuite			
Attorney Docket Number:	FLTH_0002			
Filed as Small Entity				
Filing Fees for Utility under 35 USC 111(a)				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
LATE FILING FEE FOR OATH OR DECLARATION	2051	1	80	80
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension-of-Time:				
Miscellaneous:				
Total in USD (\$)				80

Electronic Acknowledgement Receipt

EFS ID:	45417438
Application Number:	17687992
International Application Number:	
Confirmation Number:	3742
Title of Invention:	LOCATION DETERMINATION USING ANONYMOUS BROWSER DATA
First Named Inventor/Applicant Name:	Amol Waishampayan
Customer Number:	54380
Filer:	Ryan A. Peddle/Emily Tuite
Filer Authorized By:	Ryan A. Peddle
Attorney Docket Number:	FLTH_0002
Receipt Date:	07-APR-2022
Filing Date:	07-MAR-2022
Time Stamp:	13:52:17
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	\$80
RAM confirmation Number	E202247D52432654
Deposit Account	503541
Authorized User	Emily Tuite

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:
37 CFR 1.21 (Miscellaneous fees and charges)

File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Applicant Response to Pre-Exam Formalities Notice	FLTH_0002_Response_to_Notice_to_File_Missing_Parts.pdf	83967	no	1
			769b25d799bd5b33767af299cfa93700c0015e9a		
Warnings:					
Information:					
2	Oath or Declaration filed	FLTH_0002_Declaration_OF_laherty_revised.pdf	4816921	no	3
			7ecac15b52929abfc16292191b4eda98dc2ac19c		
Warnings:					
Information:					
3	Oath or Declaration filed	FLTH_0002_Declaration_Waishampayan_revised.pdf	4643265	no	3
			5522e968a5714db7f17da0f903b5c9ef64ec07c8		
Warnings:					
Information:					
4	Oath or Declaration filed	FLTH_0002_Declaration_Yakovlev_revised.pdf	4617284	no	3
			4d22a57f831f1367e8bb883af389f7f1c105ab3f		
Warnings:					
Information:					
5	Fee Worksheet (SB06)	fee-info.pdf	37961	no	2
			85cc13369936e5dbff58af5f910af46034028261		
Warnings:					
Information:					
Total Files Size (in bytes):			14199398		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875						Application or Docket Number 17/687,992			
APPLICATION AS FILED - PART I									
(Column 1)		(Column 2)		SMALL ENTITY		OR OTHER THAN SMALL ENTITY			
FOR	NUMBER FILED	NUMBER EXTRA	RATE(\$)	FEE(\$)		RATE(\$)	FEE(\$)		
BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	80		N/A			
SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A	N/A	350		N/A			
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	400		N/A			
TOTAL CLAIMS (37 CFR 1.16(j))	20	minus 20 = *	x 50	= 0.00	OR				
INDEPENDENT CLAIMS (37 CFR 1.16(h))	2	minus 3 = *	x 240	= 0.00					
APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			0.00					
MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				0.00					
			TOTAL	830		TOTAL			
* If the difference in column 1 is less than zero, enter "0" in column 2.									
APPLICATION AS AMENDED - PART II									
(Column 1)		(Column 2)		(Column 3)		SMALL ENTITY		OR OTHER THAN SMALL ENTITY	
AMENDMENT A	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE(\$)	ADDITIONAL FEE(\$)		RATE(\$)	ADDITIONAL FEE(\$)	
	Total (37 CFR 1.16(i))	*	Minus **	=	x	=	OR	x	=
	Independent (37 CFR 1.16(h))	*	Minus ***	=	x	=	OR	x	=
	Application Size Fee (37 CFR 1.16(s))						OR		
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						OR		
			TOTAL ADD'L FEE			OR	TOTAL ADD'L FEE		
(Column 1)		(Column 2)		(Column 3)		SMALL ENTITY		OR OTHER THAN SMALL ENTITY	
AMENDMENT B	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE(\$)	ADDITIONAL FEE(\$)		RATE(\$)	ADDITIONAL FEE(\$)	
	Total (37 CFR 1.16(i))	*	Minus **	=	x	=	OR	x	=
	Independent (37 CFR 1.16(h))	*	Minus ***	=	x	=	OR	x	=
	Application Size Fee (37 CFR 1.16(s))						OR		
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						OR		
			TOTAL ADD'L FEE			OR	TOTAL ADD'L FEE		
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3. ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20". *** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3". The "Highest Number Previously Paid For" (Total or Independent) is the highest found in the appropriate box in column 1.									



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
17/687,992	03/07/2022	Amol Waishampayan	FLTH_0002

CONFIRMATION NO. 3742

FORMALITIES LETTER



54380
FLASTER/GREENBERG P.C.
1717 Arch Street
Suite 3300
Philadelphia, PA 19103

Date Mailed: 03/10/2022

NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL APPLICATION

FILED UNDER 37 CFR 1.53(b)

Filing Date Granted

Items Required To Avoid Abandonment:

An application number and filing date have been accorded to this application. The item(s) indicated below, however, are missing.

Applicant is given **TWO MONTHS** from the date of this Notice within which to file all required items below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

- Surcharge as set forth in 37 CFR 1.16(f) must be submitted.

The surcharge is due for any one of:

- late submission of the basic filing fee, search fee, or examination fee,
- late submission of inventor's oath or declaration,
- filing an application that does not contain at least one claim on filing, or
- submission of an application filed by reference to a previously filed application.

SUMMARY OF FEES DUE:

The fee(s) required within **TWO MONTHS** from the date of this Notice to avoid abandonment is/are itemized below. Small entity discount is in effect. If applicant is qualified for micro entity status, an acceptable Certification of Micro Entity Status must be submitted to establish micro entity status. (See 37 CFR 1.29 and forms PTO/SB/15A and 15B.)

- \$ 80 surcharge.
- \$(0) previous unapplied payment amount.
- \$ 80 TOTAL FEE BALANCE DUE.

Items Required To Avoid Processing Delays:

Applicant is notified that the above-identified application contains the deficiencies noted below. No period for reply is set forth in this notice for correction of these deficiencies. However, if a deficiency relates to the inventor's oath or declaration, the applicant must file an oath or declaration in compliance with 37 CFR 1.63, or a substitute statement in compliance with 37 CFR 1.64, executed by or with respect to each actual inventor no later than the expiration of the time period set in the "Notice of Allowability" to avoid abandonment. See 37 CFR 1.53(f).

- A properly executed inventor's oath or declaration has not been received for the following inventor(s):

Amol Waishampayan
Pat O'Flaherty
Alexey Yakovlev

Replies must be received in the USPTO within the set time period or must include a proper Certificate of Mailing or Transmission under 37 CFR 1.8 with a mailing or transmission date within the set time period. For more information and a suggested format, see Form PTO/SB/92 and MPEP 512.

Replies should be mailed to:

Mail Stop Missing Parts
Commissioner for Patents
P.O. Box 1450
Alexandria VA 22313-1450

Registered users of EFS-Web may alternatively submit their reply to this notice via EFS-Web, including a copy of this Notice and selecting the document description "Applicant response to Pre-Exam Formalities Notice".
<https://sportal.uspto.gov/authenticate/AuthenticateUserLocalEPF.html>

For more information about EFS-Web please call the USPTO Electronic Business Center at 1-866-217-9197 or visit our website at <http://www.uspto.gov/ebc>.

If you are not using EFS-Web to submit your reply, you must include a copy of this notice.

Questions about the contents of this notice and the requirements it sets forth should be directed to the Office of Data Management, Application Assistance Unit, at **(571) 272-4000** or **(571) 272-4200** or **1-888-786-0101**.

/hnguyen/



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	TOT CLAIMS	IND CLAIMS
17/687,992	03/07/2022	3661	830	FLTH_0002	20	2

CONFIRMATION NO. 3742

FILING RECEIPT

54380

FLASTER/GREENBERG P.C.

1717 Arch Street

Suite 3300

Philadelphia, PA 19103



0000000132348464

Date Mailed: 03/10/2022

Receipt is acknowledged of this non-provisional utility patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF FIRST INVENTOR, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection.

Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please submit a written request for a corrected Filing Receipt, including a properly marked-up ADS showing the changes with strike-through for deletions and underlining for additions. If you received a "Notice to File Missing Parts" or other Notice requiring a response for this application, please submit any request for correction to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections provided that the request is grantable.

Inventor(s)

Amol Waishampayan, Philadelphia, PA;

Pat O'Flaherty, Dublin, IRELAND;

Alexey Yakovlev, Dnipro, UKRAINE;

Applicant(s)

FullThrottle Technologies, LLC, Malvern, PA

Assignment For Published Patent Application

FullThrottle Technologies, LLC, Malvern, PA

Power of Attorney: The patent practitioners associated with Customer Number 54380

Domestic Priority data as claimed by applicant

This appln claims benefit of 63/208,275 06/08/2021

Foreign Applications for which priority is claimed (You may be eligible to benefit from the **Patent Prosecution Highway** program at the USPTO. Please see <http://www.uspto.gov> for more information.) - None.

Foreign application information must be provided in an Application Data Sheet in order to constitute a claim to foreign priority. See 37 CFR 1.55 and 1.76.

Permission to Access Application via Priority Document Exchange: Yes

Permission to Access Search Results: Yes

Applicant may provide or rescind an authorization for access using Form PTO/SB/39 or Form PTO/SB/69 as appropriate.

If Required, Foreign Filing License Granted: 03/09/2022

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 17/687,992**

Projected Publication Date: 12/08/2022

Non-Publication Request: No

Early Publication Request: No

**** SMALL ENTITY ****

Title

LOCATION DETERMINATION USING ANONYMOUS BROWSER DATA

Preliminary Class

701

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications: No

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at <http://www.uspto.gov/web/offices/pac/doc/general/index.html>.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, <http://www.stopfakes.gov>. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific

countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4258).

LICENSE FOR FOREIGN FILING UNDER
Title 35, United States Code, Section 184
Title 37, Code of Federal Regulations, 5.11 & 5.15

GRANTED

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

SelectUSA

The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation, and commercialization of new technologies. The U.S. offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to promote and facilitate business investment. SelectUSA provides information assistance to the international investor community; serves as an ombudsman for existing and potential investors; advocates on behalf of U.S. cities, states, and regions competing for global investment; and counsels U.S. economic development organizations on investment attraction best practices. To learn more about why the United States is the best country in the world to develop

technology, manufacture products, deliver services, and grow your business, visit <http://www.SelectUSA.gov> or call +1-202-482-6800.

TRANSMITTAL FOR POWER OF ATTORNEY TO ONE OR MORE REGISTERED PRACTITIONERS

NOTE: This form is to be submitted with the Power of Attorney by Applicant form (PTO/AIA/82B) to identify the application to which the Power of Attorney is directed, in accordance with 37 CFR 1.5, unless the application number and filing date are identified in the Power of Attorney by Applicant form. If neither form PTO/AIA/82A nor form PTO/AIA82B identifies the application to which the Power of Attorney is directed, the Power of Attorney will not be recognized in the application.

Application Number	Not yet assigned
Filing Date	Herewith
First Named Inventor	Amol Waishampayan
Title	LOCATION DETERMINATION USING ANONYMOUS BROWSER DATA
Art Unit	Not yet assigned
Examiner Name	Not yet assigned
Attorney Docket Number	FLTH_0002

SIGNATURE of Applicant or Patent Practitioner

Signature	/Ryan A. Peddle/	Date (Optional)	2022-03-07
Name	Ryan A. Peddle	Registration Number	77,970
Title (if Applicant is a juristic entity)	Patent Practitioner		
Applicant Name (if Applicant is a juristic entity)	FullThrottle Technologies, LLC		

NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4(d) for signature requirements and certifications. If more than one applicant, use multiple forms.



*Total of (1) forms are submitted.

This collection of information is required by 37 CFR 1.131, 1.32, and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

**CERTIFICATION AND REQUEST FOR PRIORITIZED EXAMINATION
UNDER 37 CFR 1.102(e) (Page 1 of 1)**

First Named Inventor:	Amol Waishampayan	Nonprovisional Application Number (if known):	
Title of Invention:	LOCATION DETERMINATION USING ANONYMOUS BROWSER DATA		

APPLICANT HEREBY CERTIFIES THE FOLLOWING AND REQUESTS PRIORITIZED EXAMINATION FOR THE ABOVE-IDENTIFIED APPLICATION.

1. The processing fee set forth in 37 CFR 1.17(i)(1) and the prioritized examination fee set forth in 37 CFR 1.17(c) have been filed with the request. The publication fee requirement is met because that fee, set forth in 37 CFR 1.18(d), is currently \$0. The basic filing fee, search fee, and examination fee are filed with the request or have been already been paid. I understand that any required excess claims fees or application size fee must be paid for the application.
2. I understand that the application may not contain, or be amended to contain, more than four independent claims, more than thirty total claims, or any multiple dependent claims, and that any request for an extension of time will cause an outstanding Track I request to be dismissed.
3. The applicable box is checked below:

I. ☒ Original Application (Track One) - Prioritized Examination under § 1.102(e)(1)

- i. (a) The application is an original nonprovisional utility application filed under 35 U.S.C. 111(a). This certification and request is being filed with the utility application via EFS-Web.
---OR---
(b) The application is an original nonprovisional plant application filed under 35 U.S.C. 111(a). This certification and request is being filed with the plant application in paper.
- ii. An executed inventor's oath or declaration under 37 CFR 1.63 or 37 CFR 1.64 for each inventor, or the application data sheet meeting the conditions specified in 37 CFR 1.53(f)(3)(i) is filed with the application.

II. ☐ Request for Continued Examination - Prioritized Examination under § 1.102(e)(2)

- i. A request for continued examination has been filed with, or prior to, this form.
- ii. If the application is a utility application, this certification and request is being filed via EFS-Web.
- iii. The application is an original nonprovisional utility application filed under 35 U.S.C. 111(a), or is a national stage entry under 35 U.S.C. 371.
- iv. This certification and request is being filed prior to the mailing of a first Office action responsive to the request for continued examination.
- v. No prior request for continued examination has been granted prioritized examination status under 37 CFR 1.102(e)(2).

Signature /Ryan A. Peddle/	Date March 7, 2022
Name (Print/Typed) Ryan A. Peddle	Practitioner Registration Number 77,970

Note: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4(d) for signature requirements and certifications. Submit multiple forms if more than one signature is required.*

☒ *Total of 1 forms are submitted.

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Patent Application Fee Transmittal				
Application Number:				
Filing Date:				
Title of Invention:		LOCATION DETERMINATION USING ANONYMOUS BROWSER DATA		
First Named Inventor/Applicant Name:		Amol Waishampayan		
Filer:		Ryan A. Peddle/Emily Tuite		
Attorney Docket Number:		FLTH_0002		
Filed as Small Entity				
Filing Fees for Track I Prioritized Examination - Nonprovisional Application under 35 USC 111(a)				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
UTILITY FILING FEE (ELECTRONIC FILING)	4011	1	80	80
UTILITY SEARCH FEE	2111	1	350	350
UTILITY EXAMINATION FEE	2311	1	400	400
REQUEST FOR PRIORITIZED EXAMINATION	2817	1	2100	2100
Pages:				
Claims:				
Miscellaneous-Filing:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
PUBL. FEE- EARLY, VOLUNTARY, OR NORMAL	1504	1	0	0
PROCESSING FEE, EXCEPT PROV. APPLS.	2830	1	70	70
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Miscellaneous:				
Total in USD (\$)				3000

Electronic Acknowledgement Receipt

EFS ID:	45157837
Application Number:	17687992
International Application Number:	
Confirmation Number:	3742
Title of Invention:	LOCATION DETERMINATION USING ANONYMOUS BROWSER DATA
First Named Inventor/Applicant Name:	Amol Waishampayan
Customer Number:	54380
Filer:	Ryan A. Peddle/Emily Tuite
Filer Authorized By:	Ryan A. Peddle
Attorney Docket Number:	FLTH_0002
Receipt Date:	07-MAR-2022
Filing Date:	
Time Stamp:	13:52:00
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	\$ 3000
RAM confirmation Number	E202237D52280602
Deposit Account	503541
Authorized User	Emily Tuite

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:
37 CFR 1.21 (Miscellaneous fees and charges)

File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Application Data Sheet	FLTH_0002_Application_Data_Sheet.pdf	1226357	no	9
			3a694e802aeaaf850f6f6810f4ebb9d6a29d27d3		
Warnings:					
Information:					
2		FLTH_0002_Final_Specification.pdf	303465	yes	74
			5cbb23d3cac366651718871a84b2053c3f237413		
	Multipart Description/PDF files in .zip description				
	Document Description		Start	End	
	Specification		1	68	
	Claims		69	73	
	Abstract		74	74	
Warnings:					
Information:					
3	Drawings-only black and white line drawings	FLTH_0002_Final_Figures.pdf	91879	no	16
			cddb59d6a0ddf6cfcaa297fb9971423a820565fa		
Warnings:					
Information:					
4	Power of Attorney	FLTH_0002_executed_POA.pdf	174469	no	1
			34dbdc688b2fa5cd97716e5a8435d2dbc98ddc4		
Warnings:					
Information:					
5	Power of Attorney	FLTH_0002_POA_Transmittal.pdf	215048	no	1
			018f79707e259c2e8c4416ca4b3a7174372ae842		

Warnings:					
Information:					
6	Track One Request	FLTH_0002_Track_1_Request.pdf	121459 54b2f367cf9d95520a5d23c0fd7ec19168c23ef2	no	2
Warnings:					
Information:					
7	Fee Worksheet (SB06)	fee-info.pdf	50631 2063f288f6013ba0f6421dd0518a6f488346e1ea	no	2
Warnings:					
Information:					
Total Files Size (in bytes):			2183308		
This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503. <u>New Applications Under 35 U.S.C. 111</u> If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application. <u>National Stage of an International Application under 35 U.S.C. 371</u> If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course. <u>New International Application Filed with the USPTO as a Receiving Office</u> If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.					

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	FLTH_0002
		Application Number	
Title of Invention	LOCATION DETERMINATION USING ANONYMOUS BROWSER DATA		
The application data sheet is part of the provisional or nonprovisional application for which it is being submitted. The following form contains the bibliographic data arranged in a format specified by the United States Patent and Trademark Office as outlined in 37 CFR 1.76. This document may be completed electronically and submitted to the Office in electronic format using the Electronic Filing System (EFS) or the document may be printed and included in a paper filed application.			

Secrecy Order 37 CFR 5.2:

☐	Portions or all of the application associated with this Application Data Sheet may fall under a Secrecy Order pursuant to 37 CFR 5.2 (Paper filers only. Applications that fall under Secrecy Order may not be filed electronically.)
--------------------------	---

Inventor Information:

Inventor	1				Remove
Legal Name					
Prefix	Given Name	Middle Name	Family Name	Suffix	
	Amol		Waishampayan		
Residence Information (Select One) ☒ US Residency ☐ Non US Residency ☐ Active US Military Service					
City	Philadelphia	State/Province	PA	Country of Residence	US

Mailing Address of Inventor:

Address 1	400 Lapp Road				
Address 2					
City	Malvern	State/Province	PA		
Postal Code	19355	Country i	US		

Inventor	2				Remove
Legal Name					
Prefix	Given Name	Middle Name	Family Name	Suffix	
	Pat		O'Flaherty		
Residence Information (Select One) ☐ US Residency ☒ Non US Residency ☐ Active US Military Service					
City	Dublin	Country of Residence i	E		

Mailing Address of Inventor:

Address 1	400 Lapp Road				
Address 2					
City	Malvern	State/Province	PA		
Postal Code	US	Country i	US		

Inventor	3				Remove
Legal Name					
Prefix	Given Name	Middle Name	Family Name	Suffix	
	Alexey		Yakovlev		

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	FLTH_0002
		Application Number	
Title of Invention	LOCATION DETERMINATION USING ANONYMOUS BROWSER DATA		

Residence Information (Select One) ☐ US Residency ☒ Non US Residency ☐ Active US Military Service			
City	Dnipro	Country of Residence ⁱ	UA
Mailing Address of Inventor:			
Address 1	400 Lapp Road		
Address 2			
City	Malvern	State/Province	PA
Postal Code	19355	Country ⁱ	US
All Inventors Must Be Listed - Additional Inventor Information blocks may be generated within this form by selecting the Add button.			Add

Correspondence Information:

Enter either Customer Number or complete the Correspondence Information section below. For further information see 37 CFR 1.33(a).			
☐ An Address is being provided for the correspondence information of this application.			
Customer Number	54380		
Email Address	FGdocketing@flastergreenberg.com	Add Email	Remove Email

Application Information:

Title of the Invention	LOCATION DETERMINATION USING ANONYMOUS BROWSER DATA		
Attorney Docket Number	FLTH_0002	Small Entity Status Claimed	☒
Application Type	Nonprovisional		
Subject Matter	Utility		
Total Number of Drawing Sheets (if any)	16	Suggested Figure for Publication (if any)	16

Filing By Reference:

Only complete this section when filing an application by reference under 35 U.S.C. 111(c) and 37 CFR 1.57(a). Do not complete this section if application papers including a specification and any drawings are being filed. Any domestic benefit or foreign priority information must be provided in the appropriate section(s) below (i.e., "Domestic Benefit/National Stage Information" and "Foreign Priority Information").

For the purposes of a filing date under 37 CFR 1.53(b), the description and any drawings of the present application are replaced by this reference to the previously filed application, subject to conditions and requirements of 37 CFR 1.57(a).

Application number of the previously filed application	Filing date (YYYY-MM-DD)	Intellectual Property Authority or Country ⁱ

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	FLTH_0002
		Application Number	
Title of Invention	LOCATION DETERMINATION USING ANONYMOUS BROWSER DATA		

Publication Information:
☐ Request Early Publication (Fee required at time of Request 37 CFR 1.219)

Request Not to Publish. I hereby request that the attached application not be published under 35 U.S.C. 122(b) and certify that the invention disclosed in the attached application **has not and will not** be the subject of an application filed in another country, or under a multilateral international agreement, that requires publication at eighteen months after filing.

Representative Information:

Representative information should be provided for all practitioners having a power of attorney in the application. Providing this information in the Application Data Sheet does not constitute a power of attorney in the application (see 37 CFR 1.32). Either enter Customer Number or complete the Representative Name section below. If both sections are completed the customer Number will be used for the Representative Information during processing.

Please Select One:	☒ Customer Number	☐ US Patent Practitioner	☐ Limited Recognition (37 CFR 11.9)
Customer Number	54380		

Domestic Benefit/National Stage Information:

This section allows for the applicant to either claim benefit under 35 U.S.C. 119(e), 120, 121, 365(c), or 386(c) or indicate National Stage entry from a PCT application. Providing benefit claim information in the Application Data Sheet constitutes the specific reference required by 35 U.S.C. 119(e) or 120, and 37 CFR 1.78.

When referring to the current application, please leave the "Application Number" field blank.

Prior Application Status	Pending	Remove	
Application Number	Continuity Type	Prior Application Number	Filing or 371(c) Date (YYYY-MM-DD)
	Claims benefit of provisional	63/208275	2021-06-08
Additional Domestic Benefit/National Stage Data may be generated within this form by selecting the Add button.			Add

Foreign Priority Information:

This section allows for the applicant to claim priority to a foreign application. Providing this information in the application data sheet constitutes the claim for priority as required by 35 U.S.C. 119(b) and 37 CFR 1.55. When priority is claimed to a foreign application that is eligible for retrieval under the priority document exchange program (PDX)¹ the information will be used by the Office to automatically attempt retrieval pursuant to 37 CFR 1.55(i)(1) and (2). Under the PDX program, applicant bears the ultimate responsibility for ensuring that a copy of the foreign application is received by the Office from the participating foreign intellectual property office, or a certified copy of the foreign priority application is filed, within the time period specified in 37 CFR 1.55(g)(1).

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	FLTH_0002
		Application Number	
Title of Invention	LOCATION DETERMINATION USING ANONYMOUS BROWSER DATA		

			Remove
Application Number	Country ⁱ	Filing Date (YYYY-MM-DD)	Access Code ^j (if applicable)
Additional Foreign Priority Data may be generated within this form by selecting the Add button.			Add

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications

☐ This application (1) claims priority to or the benefit of an application filed before March 16, 2013 and (2) also contains, or contained at any time, a claim to a claimed invention that has an effective filing date on or after March 16, 2013. NOTE: By providing this statement under 37 CFR 1.55 or 1.78, this application, with a filing date on or after March 16, 2013, will be examined under the first inventor to file provisions of the AIA.

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	FLTH_0002
		Application Number	
Title of Invention	LOCATION DETERMINATION USING ANONYMOUS BROWSER DATA		

Authorization or Opt-Out of Authorization to Permit Access:

When this Application Data Sheet is properly signed and filed with the application, applicant has provided written authority to permit a participating foreign intellectual property (IP) office access to the instant application-as-filed (see paragraph A in subsection 1 below) and the European Patent Office (EPO) access to any search results from the instant application (see paragraph B in subsection 1 below).

Should applicant choose not to provide an authorization identified in subsection 1 below, applicant **must opt-out** of the authorization by checking the corresponding box A or B or both in subsection 2 below.

NOTE: This section of the Application Data Sheet is **ONLY** reviewed and processed with the **INITIAL** filing of an application. After the initial filing of an application, an Application Data Sheet cannot be used to provide or rescind authorization for access by a foreign IP office(s). Instead, Form PTO/SB/39 or PTO/SB/69 must be used as appropriate.

1. Authorization to Permit Access by a Foreign Intellectual Property Office(s)

A. Priority Document Exchange (PDX) - Unless box A in subsection 2 (opt-out of authorization) is checked, the undersigned hereby **grants the USPTO authority** to provide the European Patent Office (EPO), the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the State Intellectual Property Office of the People's Republic of China (SIPO), the World Intellectual Property Organization (WIPO), and any other foreign intellectual property office participating with the USPTO in a bilateral or multilateral priority document exchange agreement in which a foreign application claiming priority to the instant patent application is filed, access to: (1) the instant patent application-as-filed and its related bibliographic data, (2) any foreign or domestic application to which priority or benefit is claimed by the instant application and its related bibliographic data, and (3) the date of filing of this Authorization. See 37 CFR 1.14(h)(1).

B. Search Results from U.S. Application to EPO - Unless box B in subsection 2 (opt-out of authorization) is checked, the undersigned hereby **grants the USPTO authority** to provide the EPO access to the bibliographic data and search results from the instant patent application when a European patent application claiming priority to the instant patent application is filed. See 37 CFR 1.14(h)(2).

The applicant is reminded that the EPO's Rule 141(1) EPC (European Patent Convention) requires applicants to submit a copy of search results from the instant application without delay in a European patent application that claims priority to the instant application.

2. Opt-Out of Authorizations to Permit Access by a Foreign Intellectual Property Office(s)

☐ A. Applicant **DOES NOT** authorize the USPTO to permit a participating foreign IP office access to the instant application-as-filed. If this box is checked, the USPTO will not be providing a participating foreign IP office with any documents and information identified in subsection 1A above.

☐ B. Applicant **DOES NOT** authorize the USPTO to transmit to the EPO any search results from the instant patent application. If this box is checked, the USPTO will not be providing the EPO with search results from the instant application.

NOTE: Once the application has published or is otherwise publicly available, the USPTO may provide access to the application in accordance with 37 CFR 1.14.

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	FLTH_0002
		Application Number	
Title of Invention	LOCATION DETERMINATION USING ANONYMOUS BROWSER DATA		

Applicant Information:

Providing assignment information in this section does not substitute for compliance with any requirement of part 3 of Title 37 of CFR to have an assignment recorded by the Office.

Applicant	1	Remove
If the applicant is the inventor (or the remaining joint inventor or inventors under 37 CFR 1.45), this section should not be completed. The information to be provided in this section is the name and address of the legal representative who is the applicant under 37 CFR 1.43; or the name and address of the assignee, person to whom the inventor is under an obligation to assign the invention, or person who otherwise shows sufficient proprietary interest in the matter who is the applicant under 37 CFR 1.46. If the applicant is an applicant under 37 CFR 1.46 (assignee, person to whom the inventor is obligated to assign, or person who otherwise shows sufficient proprietary interest) together with one or more joint inventors, then the joint inventor or inventors who are also the applicant should be identified in this section. Clear		
Assignee	Legal Representative under 35 U.S.C. 117	Joint Inventor
☐ Person to whom the inventor is obligated to assign.		☐ Person who shows sufficient proprietary interest
If applicant is the legal representative, indicate the authority to file the patent application, the inventor is:		
Name of the Deceased or Legally Incapacitated Inventor:		
If the Applicant is an Organization check here. ☒		
Organization Name	FullThrottle Technologies, LLC	
Mailing Address Information For Applicant:		
Address 1	400 Lapp Road	
Address 2		
City	Malvern	State/Province
Country	US	Postal Code
Phone Number		Fax Number
Email Address		
Additional Applicant Data may be generated within this form by selecting the Add button. Add		

Assignee Information including Non-Applicant Assignee Information:

Providing assignment information in this section does not substitute for compliance with any requirement of part 3 of Title 37 of CFR to have an assignment recorded by the Office.

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	FLTH_0002
		Application Number	
Title of Invention	LOCATION DETERMINATION USING ANONYMOUS BROWSER DATA		

Assignee	1		
Complete this section if assignee information, including non-applicant assignee information, is desired to be included on the patent application publication. An assignee-applicant identified in the "Applicant Information" section will appear on the patent application publication as an applicant. For an assignee-applicant, complete this section only if identification as an assignee is also desired on the patent application publication.			
Remove			
If the Assignee or Non-Applicant Assignee is an Organization check here. ☒			
Organization Name	FullThrottle Technologies, LLC		
Mailing Address Information For Assignee including Non-Applicant Assignee:			
Address 1	400 Lapp Road		
Address 2			
City	Malvern	State/Province	PA
Country ⁱ	US	Postal Code	19355
Phone Number		Fax Number	
Email Address			
Additional Assignee or Non-Applicant Assignee Data may be generated within this form by selecting the Add button. Add			

Signature:[Remove](#)

NOTE: This Application Data Sheet must be signed in accordance with 37 CFR 1.33(b). However, if this Application Data Sheet is submitted with the **INITIAL** filing of the application and either box A or B is **not** checked in subsection 2 of the "Authorization or Opt-Out of Authorization to Permit Access" section, then this form must also be signed in accordance with 37 CFR 1.14(c).

This Application Data Sheet **must** be signed by a patent practitioner if one or more of the applicants is a **juristic entity** (e.g., corporation or association). If the applicant is two or more joint inventors, this form must be signed by a patent practitioner, **all** joint inventors who are the applicant, or one or more joint inventor-applicants who have been given power of attorney (e.g., see USPTO Form PTO/AIA/81) on behalf of **all** joint inventor-applicants.

See 37 CFR 1.4(d) for the manner of making signatures and certifications.

Signature	/Ryan A. Peddle/		Date (YYYY-MM-DD)	2022-03-07	
First Name	Ryan A.	Last Name	Peddle	Registration Number	77,970
Additional Signature may be generated within this form by selecting the Add button. Add					

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	FLTH_0002
		Application Number	
Title of Invention	LOCATION DETERMINATION USING ANONYMOUS BROWSER DATA		

This collection of information is required by 37 CFR 1.76. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 23 minutes to complete, including gathering, preparing, and submitting the completed application data sheet form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

LOCATION DETERMINATION USING ANONYMOUS BROWSER DATA

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application claims priority to U.S. Provisional Patent App. No. 63/208,275, filed June 8, 2021, the disclosure of which is hereby incorporated by reference herein in its entirety.

BACKGROUND

[0002] Various businesses market products using websites. Each product may have a dedicated webpage that is accessible from the business's website. Consumers access the specific webpages for more information regarding the specific products offered by the business entity. In an example, the business may be a car dealership (*e.g.*, a car dealer). The car dealer may operate specific webpages for specific vehicles. Potential customers access the specific webpages for more information regarding the specific vehicles. The car dealer may be interested in understanding how many times a potential customer visits specific vehicle webpages via the dealer website. The car dealer may also be interested in learning more information about the potential customer.

[0003] Car dealers also usually offer vehicle services, for example, such as maintenance services, corrective services, and collision services. Car owners or operators can choose to have their car serviced by the car dealer with whom they purchased their car, another local car dealer, a service shop, and/or the like. The car owners or operators may access a car dealer's service website for more information regarding the services available.

SUMMARY

[0004] Systems, methods, and apparatus are described herein for determining a location from anonymous data. For example, a computing device may receive anonymous data associated with a browser session initialized by a user via a browser on a user computing device. The computing device may determine that the user has not been assigned a unique identifier. The computing device may determine whether the user opted-in to location tracking. If the user opted-out of

location tracking, the computing device may determine a latitude coordinate and a longitude coordinate of the user computing device during the browser session. The computing device may identify a physical address for the user based on the latitude coordinate and the longitude coordinate, for example, using a map application programming interface (API). The computing device may assign the unique identifier to the user. The computing device may associate the unique identifier to the physical address. The computing device may determine one or more of an address type, a name of the user, an age of the user, a gender of the user, demographics associated with the user, and/or psychographics associated with the user. The computing device may determine a confidence rating for the user based on a frequency of visits to a specific URL, the physical address, demographics associated with the user, and/or psychographics associated with the user. The confidence rating may be an indication of the user's interest in a product. The confidence rating may be determined using an algorithm (*e.g.*, a learning algorithm).

[0005] Systems, methods, and apparatus are described herein for determining a vehicle health score. A computing device may receive information associated with a vehicle. The computing device may determine a vehicle age and/or a vehicle mileage based on the received vehicle information. The computing device may determine whether the vehicle age is greater than a threshold age. The computing device may determine whether the vehicle mileage is greater than a threshold mileage. The computing device may identify prior service information for the vehicle. The computing device may determine a health score for the vehicle based on the vehicle age, the vehicle mileage, and the prior service information for the vehicle. The prior service information may include a last service date and/or a number of miles driven since the last service date. The health score may be determined using an algorithm (*e.g.*, a learning algorithm). The computing device may be configured to send a notification to an operator of the vehicle based on the determined health score. The notification may include a service reminder or a service coupon when the determined health score is less than or equal to a predefined health threshold. The notification may include a marketing offer when the determined health score is greater than a predefined health threshold.

[0006] Systems, methods, and apparatus are described herein for determining a probability that a browsing session was initiated in response to watching and/or listening to media associated with a campaign. A computing device may receive data associated with a campaign. The data

associated with the campaign may indicate a first set of impression proportions on a plurality of dates and a second set of impression proportions during a plurality of dayparts. The plurality of dates may include the dates within a time period of the campaign. The computing device may identify a browsing session that visited a specific URL. The browsing session may be associated with an address that is within a zone covered by the campaign. The computing device may determine a date and a time of day that the browsing session visited the specific URL. The computing device may determine that the date is within a time period associated with the campaign. The computing device may identify a first impression proportion of the first set of impression proportions that is associated with the determined date. The first set of impression proportions may include respective impression proportions of campaign impressions for each of the plurality of dates. A campaign impression may include an instance of media associated with the campaign being watched and/or listened to. The computing device may identify a second impression proportion of the second set of impression proportions that is associated with the time of day. The second set of impression proportions comprises respective impression proportions of campaign impressions for each of the plurality of dayparts. Each of the plurality of dayparts may include a portion of a day. The computing device may determine a probability that the browsing session was initiated in response to a user watching or listening to media associated with the campaign. The computing device may determine whether the user performed a transaction associated with the campaign. The computing device may determine whether the browsing session was initiated by a direct search or an organic search.

BRIEF DESCRIPTION OF THE DRAWINGS

[0007] FIG. 1 illustrates a block diagram of an example computing device.

[0008] FIG. 2 illustrates a block diagram of an example computing network system.

[0009] FIG. 3 is a flow diagram illustrating an example method that may be implemented to identify a physical address of a user based on anonymous data.

[0010] FIG. 4 is a flow diagram illustrating an example method for associating a unique identifier with location data from a browser session.

[0011] FIG. 5 is a flow diagram illustrating an example method for associating a unique identifier with a physical address of a user.

[0012] FIG. 6 is a flow diagram illustrating an example method for determining a user's interest in a product.

[0013] FIG. 7 is an example graphical user interface for a vehicle health assessment.

[0014] FIG. 8 is a flow diagram illustrating an example method for determining a health score associated with a vehicle.

[0015] FIG. 9 is a flow diagram illustrating an example method for updating a health score associated with a vehicle.

[0016] FIG. 10 is a flow diagram illustrating an example method for determining a probability that a browsing session was initiated in response to watching and/or listening to media associated with a campaign.

[0017] FIG. 11 is a flow diagram illustrating an example method for determining whether a household performed a transaction associated with a campaign.

[0018] FIG. 12 is a flow diagram illustrating another example method for determining a probability that a browsing session was initiated in response to watching and/or listening to media associated with a campaign.

[0019] FIG. 13 is a flow diagram illustrating another example method for determining a probability that a browsing session was initiated in response to watching and/or listening to media associated with a campaign.

[0020] FIG. 14 is a flow diagram illustrating another example method for determining a probability that a browsing session was initiated in response to watching and/or listening to media associated with a campaign.

[0021] FIG. 15 is a flow diagram illustrating an example method for associating a unique identifier with a physical address associated with a user and then determining a probability that

that user initiated a browser session in response to watching and/or listening media associated with a campaign.

[0022] FIG. 16 is a flow diagram illustrating an example method for associating a unique identifier with a physical address associated with a user and then determining when to send notifications to the user.

DETAILED DESCRIPTION

[0023] FIG. 1 illustrates a block diagram of an example computing device 100. The computing device 100 may include a personal computer, such as a laptop or desktop computer, a tablet device, a cellular phone or smartphone, a server, or another type of computing device. The computing device 100 may include a processor 102, a communication interface 104, a memory 106, a display 108, input devices 110, output devices 112, and/or a GPS circuit 114. The computing device 100 may include additional, different, or fewer components.

[0024] The processor 102 may include one or more general purpose processors, special purpose processors, conventional processors, digital signal processors (DSPs), microprocessors, integrated circuits, a programmable logic device (PLD), application specific integrated circuits (ASICs), or the like. The processor 102 may perform signal coding, data processing, image processing, power control, input/output processing, and/or any other functionality that enables the computing device 100 to perform as described herein.

[0025] The processor 102 may store information in and/or retrieve information from the memory 106. The memory 106 may include a non-removable memory and/or a removable memory. The non-removable memory may include random-access memory (RAM), read-only memory (ROM), a hard disk, or any other type of non-removable memory storage. The removable memory may include a subscriber identity module (SIM) card, a memory stick, a memory card, or any other type of removable memory. The memory may be local memory or remote memory external to the computing device 100. The memory 106 may store instructions which are executable by the processor 102. Different information may be stored in different locations in the memory 106.

[0026] The memory 106 may comprise a computer-readable storage media or machine-readable storage media that stores computer-executable instructions for performing as described herein. The computer-executable instructions may comprise one or more portions of the procedures 300, 400, 500, 600, 800, 900, 1000, 1100, 1200, 1300, 1400, 1500, and/or 1600 for performing as described herein. The processor 102 may access the instructions from memory 106 for being executed to cause the processor 102 to operate as described herein, or to operate one or more devices as described herein.

[0027] The processor 102 that may communicate with other devices via the communication device 104. The communication device 104 may transmit and/or receive information over the network 116, which may include one or more other computing devices. The communication device 104 may perform wireless and/or wired communications. The communication device 104 may include a receiver, transmitter, transceiver, or other device capable of performing wireless communications via an antenna. The communication device 104 may be capable of communicating via one or more protocols, such as a cellular communication protocol, a Wi-Fi communication protocol, Bluetooth®, a near field communication (NFC) protocol, an internet protocol, another proprietary protocol, or any other radio frequency (RF) or communications protocol. The computing device 100 may include one or more communication devices 104.

[0028] The processor 102 may be in communication with a display 108 for providing information to a user. The information may be provided via a user interface on the display 108. The information may be provided as an image generated on the display 108. The display 108 and the processor 102 may be in two-way communication, as the display 108 may include a touch-screen device capable of receiving information from a user and providing such information to the processor 102.

[0029] The processor 102 may be in communication with a GPS circuit 114 for receiving geospatial information. The processor 102 may be capable of determining the GPS coordinates of the wireless communication device 100 based on the geospatial information received from the GPS circuit 114. The geospatial information may be communicated to one or more other communication devices to identify the location of the computing device 100.

[0030] The processor 102 may be in communication with input devices 110 and/or output devices 112. The input devices 110 may include a camera, a microphone, a keyboard or other buttons or keys, and/or other types of input devices for sending information to the processor 102. The display 108 may be a type of input device, as the display 108 may include touch-screen sensor capable of sending information to the processor 102. The output devices 112 may include speakers, indicator lights, or other output devices capable of receiving signals from the processor 102 and providing output from the computing device 100. The display 108 may be a type of output device, as the display 108 may provide images or other visual display of information received from the processor 102.

[0031] FIG. 2 illustrates a block diagram of an example computing network system 200. The computing network system 200 may include one or more computing devices 230a-230n that may be capable of communicating digital messages with one another, either directly or via the network 220. The computing devices 230-230n may be user devices capable of logging into a session (*e.g.*, a browsing session) of an interactive computing environment and providing real-time interactive data via the network 220. The network 220 may include a wired and/or wireless network. For example, the network 220 may include a Wi-Fi communication network, a Wi-MAX communication network, a cellular communication network (*e.g.*, CDMA, HSPA+, LTE, etc.), and/or a television white space (TVWS) communication network. The network 220 may include one or more communication networks.

[0032] The one or more computing devices 230a-230n may be capable of communicating digital messages to and/or receiving digital messages from the computing device 210 via the network 220. The computing device 210 may be a server, such as a web server, for providing a user interface to the computing devices 230a-230n. The computing device 210 may be in communication with an application executing locally on the computing devices 230a-230n for providing a user interface at the computing devices. The display of information may be generated locally at the computing devices 230a-230n or at the computing device 210 and provided via an application (*e.g.*, a web browser) at the computing devices 230a-230n.

[0033] One or more of the computing devices 230a-230n may be operated by an administrative user capable of configuring sessions of an interactive computing environment that may be stored at the computing device 210. The computing device operated by the

administrative user may submit credentials to the computing device 210 to allow the session to be configured. The session may be accessed by the computing devices 230a-230n via the network 220.

[0034] FIG. 3 is a flow diagram of an example method 300 that may be implemented by one or more computing devices (*e.g.*, such as the computing devices 230a-230n shown in FIG. 2) to identify a physical address of a user based on anonymous data. The method 300, or portions thereof, may be performed to enable engagement with the user based on one or more return visits to a uniform resource locator (URL). Engagement with the user may include sending notification(s) to the user, determining one or more advertisements for the user, track service needs for a vehicle operated by the user or someone in the user's household, and/or the like. For example, the user may be an owner/operator of the vehicle. The notification(s) may include emails, text messages, mobile phone notifications, phone calls, advertisements, and/or the like. The method 300, or portions thereof, may be performed at a single computing device or may be distributed across multiple computing devices (*e.g.*, multiple servers and/or a user device). The method 300, or portions thereof, may be performed to enable users, such as administrative users, to determine that the user has a specific interest in one or more products. The method 300, or portions thereof, may be performed to enable the administrative users to quantify the user's interest in the product(s). The method 300, or portions thereof, may be performed to enable adaptive generation of notifications to the user based on the specific interest in the product and/or the physical address associated with the user. The method 300 may comprise instructions that may be stored in memory as computer-readable or machine-readable storage media that may be executed by the one or more computing devices for executing the method 300. The method 300, or portions thereof, may reduce the amount of processing resources used by the computing device during a predetermined period (*e.g.*, day). The method 300, or portions thereof, may improve the functionality of a computer network system (*e.g.*, such as the computing network system 200 shown in FIG. 2) associated with engagement of the user. In addition, the method 300, or portions thereof, may implement a distributed network architecture, as shown in FIG. 2, which may reduce the amount of signaling between a user computing device and one or more administrative computing devices (*e.g.*, such as the computing devices 230a, 230b, 230n shown in FIG. 2) and may reduce the amount of processing resources consumed by the administrative computing device(s).

[0035] The method 300 may start, at 302, when a user computing device (*e.g.*, such as computing device 210 shown in FIG. 2) accesses a URL. For example, a user may initialize a browser application on the user computing device and may navigate to a website (*e.g.*, the URL) within the browser application using a browser session. The user may visit various URLs associated with a brand (*e.g.*, manufacturer, company, etc.). Each of the URLs may correspond to a product sold by the brand.

[0036] As illustrated in FIG. 3, a computing device (*e.g.*, such as computing device 230a, 230b, or 230n shown in FIG. 2) may receive, at 304, data from the browser session on the user computing device. The computing device may be associated with the URL. For example, the computing device may be a server that administers and/or manages a resource associated with the URL. The computing device may initialize a script (*e.g.*, javascript, PHP, Python, Ruby, Groovy, Perl, and/or the like) when the data is received via the browser session. The computing device may retrieve the data using the script. The data may be associated with the user, the user computing device, and/or the browser application associated with the browser session. The data may be anonymous data (*e.g.*, data that includes no personally identifiable information associated with the user). The anonymous data may include a time, a date, one or more website URLs, a referring URL, a browser type, a language, an IP address, and/or location data. The computing device may determine a device type based on the browser type. For example, the computing device may determine whether the user computing device is a mobile device based on the browser type. The location data may include a latitude coordinate, a longitude coordinate, and/or a device accuracy indication. The device accuracy indication may indicate the accuracy associated with the user computing device's measurements of the latitude coordinate and the longitude coordinate. For example, the device accuracy indication may indicate the accuracy of the user computing device's GPS (*e.g.*, such as the GPS 114 shown in FIG. 1). The device accuracy may depend on the device type. For example, a mobile device may indicate a device accuracy of approximately 2 meters or less and a computer that accesses the URL via a router may indicate a device accuracy of approximately 70 meters. The anonymous data may be included in a header (*e.g.*, a HTTP request header) received from the user computing device, included in the IP address of the user computing device, included in scripts at the application-level, etc.

[0037] The computing device may determine, at 306, location data associated with the browser session. For example, the data received from the browser session may include the location data, as described herein. Additionally or alternatively, the computing device may determine the location data using a tracking cookie installed in the browser application on the user computing device. Using IP address and/or router location information may not provide accurate enough location data to identify a precise physical address for the user/user computing device. For example, an accuracy of approximately 70 meters could include a plurality of physical addresses within that radius. Using latitude and longitude location data of a mobile device may provide more accurate location data to enable identification of the precise physical address for the user/user computing device.

[0038] At 308, the computing device may determine a physical address (*e.g.*, a postal address) for the browser session using the location data. The physical address may indicate a postal address at which the user accessed the URL in the browser session. For example, the computing device may generate, at 308, the physical address using a map API (*e.g.*, such as Bing Maps API, Mapbox API, OpenStreetMap API, Leaflet API, OpenLayers API, Google Maps API, and/or another map API). For example, the computing device may translate, at 308, the received latitude and longitude coordinates into the physical address using the map API. The computing device may determine an address type (*e.g.*, residential, apartment/condo building, single family home, commercial, and/or the like) based on the physical address. For example, the computing device may determine the address type using a postal service API. The computing device may use the address type to determine a type and/or frequency of notifications sent to the user. The user may access the URL at multiple locations/addresses (*e.g.*, home, work, store, restaurant, friend's home, etc.). The user computing device may identify which location/address is a primary address (*e.g.*, home) and which location(s)/address(es) are secondary addresses, for example, based on the frequency of accessing the URL at each location/address. The user computing device may associate the secondary address(es) to the primary address.

[0039] The computing device may determine other user information based on the physical address such as a name associated with the user, an age of the user, a gender of the user, demographics associated with the user, and/or psychographics associated with the user. The demographics associated with the user may include race, marital status, household size,

occupation, income, education, and/or living status. The psychographics associated with the user may include personality traits, lifestyles, interests, opinions, beliefs, values, etc. The computing device may determine the type and/or the frequency of notifications sent to the user based on the other information. The computing device may determine the content of the notifications based on the other information.

[0040] The computing device may generate a profile for the user, for example, based on the physical address and/or the other user information. The user profile may be used to track a plurality of factors associated with the user and the user's activity. For example, the user profile may track which URLs the user accesses, the frequency with which the user accesses the URL(s), demographics associated with the user, the address(es) associated with the user, the devices associated with the user etc. For example, the computing device may associate multiple unique identifiers having the same location data with the same user profile. The user profile may be used to generate a targeted marketing campaign.

[0041] At 310, the computing device may be configured to identify subsequent return visits to the URL (*e.g.*, and related URLs) from the browser, the user computing device, and/or the physical address. For example, the computing device may store a unique ID in the browser application (*e.g.*, using a cookie or using the local browser cache) to recognize that another browser session accessing the URL is from the user computing device at the same physical address. When another user computing device at the same physical address accesses the URL, the computing device may determine that that other user computing device is the same user and/or user household. The computing device may identify, at 310, that the user computing device is accessing the URL at a secondary address (*e.g.*, associated with the user and/or user profile). The computing device may store a timestamp and the URL of each subsequent return visit from the browser, the user computing device, and/or the physical address. That is, the computing device may create a log of URLs accessed by a user profile associated with the browser, the user computing device, and/or the physical address. The log may track the timestamp and URL of each website accessed via the browser. The method 300 may end, at 312.

[0042] FIG. 4 is a flow diagram of an example method 400 that may be implemented by one or more computing devices (*e.g.*, such as the computing devices 230a-230n shown in FIG. 2) to associate a unique identifier with location data from a browser session. The method 400, or

portions thereof, may be performed to enable engagement with the user based on one or more visits to a URL. Engagement with the user may include sending notification(s) to the user, determining one or more advertisements for the user, track service needs for a vehicle owned and/or operated by the user or someone in the user's household, and/or the like. The notification(s) may include emails, text messages, mobile phone notifications, phone calls, advertisements, and/or the like. The method 400, or portions thereof, may be performed at a single computing device or may be distributed across multiple computing devices (*e.g.*, multiple servers and/or a user device). The method 400, or portions thereof, may be performed to enable users, such as administrative users, to determine that the user has a specific interest in one or more products. The method 400, or portions thereof, may be performed to enable the administrative users to quantify the user's interest in the product(s). The method 400, or portions thereof, may be performed to enable adaptive generation of notifications to the user based on the specific interest in the product and/or the physical address associated with the user. The method 400 may comprise instructions that may be stored in memory as computer-readable or machine-readable storage media that may be executed by the one or more computing devices for executing the method 400. The method 400, or portions thereof, may reduce the amount of processing resources used by the computing device during a predetermined period (*e.g.*, day). The method 400, or portions thereof, may improve the functionality of a computer network system (*e.g.*, such as the computing network system 200 shown in FIG. 2) associated with engagement of the user. In addition, the method 400, or portions thereof, may implement a distributed network architecture, as shown in FIG. 2, which may reduce the amount of signaling between a user computing device and one or more administrative computing devices (*e.g.*, such as the computing devices 230a, 230b, 230n shown in FIG. 2) and may reduce the amount of processing resources consumed by the administrative computing device(s).

[0043] The method 400 may start, at 402, when a user computing device (*e.g.*, such as computing device 210 shown in FIG. 2) accesses a URL. For example, a user may initialize a browser application on the user computing device and may navigate to the URL within the browser application using a browser session.

[0044] As illustrated in FIG. 4, a computing device (*e.g.*, such as computing device 230a, 230b, or 230n shown in FIG. 2) may receive, at 404, data from the browser session on the user

computing device. The computing device may be associated with the URL. For example, the computing device may be a server that administers and/or manages a resource associated with the URL. The computing device may initialize a script (*e.g.*, javascript, PHP, Python, Ruby, Groovy, Perl, and/or the like) when the data is received via the browser session. The computing device may retrieve the data using the script. The data may be associated with the user, the user computing device, and/or the browser application associated with the browser session. The data may be anonymous data (*e.g.*, data that includes no personally identifiable information associated with the user). The anonymous data may include a time, a date, a webpage URL, a referring URL, a browser type, a language, an IP address, and/or location data. The computing device may determine a device type based on the browser type. For example, the computing device may determine whether the user computing device is a mobile device based on the browser type. The location data may include a latitude coordinate, a longitude coordinate, and/or a device accuracy indication. The device accuracy indication may indicate the accuracy associated with the user computing device's measurements of the latitude coordinate and the longitude coordinate. For example, the device accuracy indication may indicate the accuracy of the user computing device's GPS (*e.g.*, such as the GPS 114 shown in FIG. 1). The device accuracy may depend on the device type. For example, a mobile device may indicate a device accuracy of approximately 2 meters or less and a computer that accesses the URL via a router may indicate a device accuracy of approximately 70 meters. The anonymous data may be included in a header (*e.g.*, a HTTP request header) received from the user computing device, included in the IP address of the user computing device, included in scripts at the application-level, etc.

[0045] The computing device may determine, at 406, whether there is a unique identifier that is associated with the user (*e.g.*, the user computing device, the browser, and/or the browser session) stored on the computing device. For example, the script may inform the computing device that there is no unique identifier for the user computing device. The computing device may determine that there is no unique identifier associated with the user computing device when there is no location data stored for the user computing device. For example, the computing device may access a database or other storage location that maintains a mapping of unique identifier to a browser session, a user computing device, and/or location data. Additionally or alternatively, the computing device may determine whether there is a unique identifier for

associated with the user based on presence of a location tracker (*e.g.*, cookie) installed in the browser application on the user computing device. The tracker may include the unique identifier associated with the user. The tracker may have been installed in the user's browser application (*e.g.*, by the computing device) during a previous visit to the URL via the user's browser application, for example, if the user opted-in to location tracking, as described herein.

[0046] At 408, the computing device may determine location data associated with the browser session. For example, the data received from the browser session may include the location data, as described herein. Additionally or alternatively, the computing device may determine the location data using the tracker installed in the browser application on the user computing device. The computing device may determine a physical address (*e.g.*, a postal address) for the browser session using the location data. The physical address may indicate a postal address at which the user accessed the URL in the browser session. For example, the computing device may generate, at 408, the physical address using a map API (*e.g.*, such as Bing Maps API, Mapbox API, OpenStreetMap API, Leaflet API, OpenLayers API, Google Maps API, and/or another map API). For example, the computing device may translate, at 408, the received latitude and longitude coordinates into the physical address using the map API.

[0047] The computing device may determine an address type (*e.g.*, residential, apartment/condo building, single family home, commercial, and/or the like) based on the physical address. For example, the computing device may determine the address type using a postal service API. The computing device may use the address type to determine a type and/or frequency of notifications sent to the user. The computing device may determine other user information based on the physical address such as a name associated with the user, an age of the user, a gender of the user, demographics associated with the user, and/or psychographics associated with the user. The demographics associated with the user may include race, marital status, household size, occupation, income, education, and/or living status. The psychographics associated with the user may include personality traits, lifestyles, interests, opinions, beliefs, values, etc. The computing device may determine the type and/or the frequency of notifications sent to the user based on the other information. The computing device may determine the content of the notifications based on the other information.

[0048] At 410, the computing device may be configured to generate a unique identifier for the browser. The unique identifier may be generated randomly. The unique identifier may be universally unique. That is, the unique identifier may be unique for all browsers, all device types, all locations, etc. Alternatively, the unique identifier may be parsed from the data received in the browser session. Stated differently, the computing device may determine the unique identifier for the browser based on the data received, at 404, via the browser session. The computing device may send the unique identifier to the user computing device (*e.g.*, for storage in local browser cache or a cookie).

[0049] At 412, the computing device may associate the generated unique identifier with the determined location data. For example, the computing device may map, at 412, the unique identifier to the location data (*e.g.*, physical address). The mapping between the unique identifier and the location data may enable identification of future visits to the URL by the user. The method 400 may end, at 414.

[0050] FIG. 5 is a flow diagram of an example method 500 that may be implemented by one or more computing devices (*e.g.*, such as the computing devices 230a-230n shown in FIG. 2) to associate a unique identifier with a physical address associated with a user. The method 500, or portions thereof, may be performed to enable engagement with the user based on one or more visits to a URL. Engagement with the user may include sending notification(s) to the user, determining one or more advertisements for the user, track service needs for a vehicle operated by the user or someone in the user's household, and/or the like. The notification(s) may include emails, text messages, mobile phone notifications, phone calls, advertisements, and/or the like. The method 500, or portions thereof, may be performed at a single computing device or may be distributed across multiple computing devices (*e.g.*, multiple servers and/or a user device). The method 500, or portions thereof, may be performed to enable users, such as administrative users, to determine that the user has a specific interest in one or more products. The method 500, or portions thereof, may be performed to enable the administrative users to quantify the user's interest in the product(s). The method 500, or portions thereof, may be performed to enable adaptive generation of notifications to the user based on the specific interest in the product(s) and/or the physical address associated with the user. The method 500, or portions thereof, may reduce the amount of processing resources used by the computing device during a predetermined

period (*e.g.*, day). The method 500 may comprise instructions that may be stored in memory as computer-readable or machine-readable storage media that may be executed by the one or more computing devices for executing the method 500. The method 500, or portions thereof, may improve the functionality of a computer network system (*e.g.*, such as the computing network system 200 shown in FIG. 2) associated with engagement of the user. In addition, the method 500, or portions thereof, may implement a distributed network architecture, as shown in FIG. 2, which may reduce the amount of signaling between a user computing device and one or more administrative computing devices (*e.g.*, such as the computing devices 230a, 230b, 230n shown in FIG. 2) and may reduce the amount of processing resources consumed by the administrative computing device(s). The method 500, or portions thereof, may enable tracking of a user without the use of tracking cookies. The method 500, or portions thereof, may be combined with the method 300 and/or the method 400.

[0051] The method 500 may start, at 502, when a user computing device (*e.g.*, such as computing device 210 shown in FIG. 2) accesses a URL. For example, a user may initialize a browser application on the user computing device and may navigate to the URL within the browser application using a browser session.

[0052] As illustrated in FIG. 5, a computing device (*e.g.*, such as computing device 230a, 230b, or 230n shown in FIG. 2) may receive, at 504, data from the browser session on the user computing device. The computing device may be associated with the URL. For example, the computing device may be a server that administers and/or manages a resource associated with the URL. The data may be associated with the user, the user computing device, and/or the browser application associated with the browser session. The data may be anonymous data (*e.g.*, data that includes no personally identifiable information associated with the user). The anonymous data may include a time, a date, a webpage URL, a referring URL, a browser type, a language, an IP address, and/or location data. The computing device may determine a device type based on the browser type. For example, the computing device may determine whether the user computing device is a mobile device based on the browser type. The location data may include a latitude coordinate, a longitude coordinate, and/or a device accuracy indication. The device accuracy indication may indicate the accuracy associated with the user computing device's measurements of the latitude coordinate and the longitude coordinate. For example, the

device accuracy indication may indicate the accuracy of the user computing device's GPS (*e.g.*, such as the GPS 114 shown in FIG. 1). The device accuracy may depend on the device type. For example, a mobile device may indicate a device accuracy of approximately 2 meters or less and a computer that accesses the URL via a router may indicate a device accuracy of approximately 70 meters. The anonymous data may be included in a header (*e.g.*, a HTTP request header) received from the user computing device, included in the IP address of the user computing device, included in scripts at the application-level, etc.

[0053] The computing device may determine, at 506, whether there is a unique identifier that is associated with the user (*e.g.*, the user computing device, the browser, and/or the browser session) stored on the computing device. The computing device may determine that there is no unique identifier associated with the user computing device when there is no location data stored for the user computing device. For example, the computing device may access a database or other storage location that maintains a mapping of unique identifier to a browser session, a user computing device, and/or location data. Additionally or alternatively, the computing device may determine whether there is a unique identifier for associated with the user based on presence of a tracker (*e.g.*, cookie) installed in the browser application on the user computing device. The tracker may include the unique identifier associated with the user. The tracker may have been installed in the user's browser application (*e.g.*, by the computing device) during a previous visit to the URL via the user's browser application, for example, if the user opted-in to location tracking, as described herein.

[0054] When the computing device determines that there is no unique identifier assigned to the user, the computing device may be configured to generate, at 508, a unique identifier for the user. The unique identifier may be generated randomly. The unique identifier may be universally unique. That is, the unique identifier may be unique for all browsers, all device types, all locations, etc. Alternatively, the unique identifier may be parsed from the data received in the browser session. Stated differently, the computing device may determine the unique identifier for the user based on the data received, at 504, via the browser session.

[0055] The computing device may determine, at 510, whether the user opted-in to location tracking. For example, the user may be asked to opt-in to location tracking when accessing the URL. The user may respond to a prompt by opting in or opting out to location tracking.

[0056] When the user opts-in to location tracking, the computing device may install, at 510 a tracker (*e.g.*, a cookie) in the browser application on the user computing device. The cookie may be configured to enable the computing device to retrieve geo-location data from the user computing device. The cookie may enable the computing device to recognize return visits by the user computing device. The cookie (*e.g.*, a tracking cookie, browser cookie, HTTP cookie, etc.) may include a small string or segment of text that may be transmitted to the user computing device and stored at the user computing device by a browser application. For example, the cookie may include one or more name-value pairs containing bits of information such as, user preferences, an identifier (*e.g.*, the unique ID assigned at 508) for a server-based user session, and/or other data used by the computing device (*e.g.*, a server and/or website). The cookie may be used for authenticating, session tracking (*e.g.*, state maintenance), and/or for tracking specific information about a user, such as site preferences, and/or to maintain data related to the user and/or user computing device during navigation. The cookie may be sent in an HTTP header by the computing device to the browser application at the user computing device. The cookie may be sent back to the computing unchanged by the browser application, for example, each time the browser application accesses the URL, introducing state into what may be otherwise stateless HTTP transactions. The computing device may set the cookie at the user computing device in response to a request for a target website (*e.g.*, the URL), the computing device may generate and transmit an HTTP response that includes an HTTP header that includes the parameters for the cookie (*e.g.*, in the form of text) and/or code (*e.g.*, Set-Cookie) requesting the browser application to set the cookie based on the parameters in the HTTP header.

[0057] When the user opts-out to location tracking, the computing device may store, at 514, a unique ID (*e.g.*, the unique ID assigned at 508) in a local cache of the user computing device (*e.g.*, of the browser). The unique ID may be stored in the local browser cache, for example, even if the user computing device does not allow cookies (*e.g.*, full cookies). Storing the unique ID in the local browser cache may enable the computing device to recognize return visits by the user computing device via the browser application. The unique ID may be used for authenticating, session tracking (*e.g.*, state maintenance), and/or for tracking specific information about a user, such as site preferences, and/or to maintain data related to the user and/or user computing device during navigation. The unique ID may be sent in an HTTP header by the computing device to the browser application at the user computing device. The computing

device may store the unique ID in the local browse cache at the user computing device in response to a request for a target website (*e.g.*, the URL). The user computing device may store the unique ID as key/value (*e.g.*, string to string) in the local browser cache. The unique ID may enable persistence across browser sessions. For example, the unique ID may be recognizable in subsequent browser sessions. The unique ID may remain in the local browser cache, for example, until the local browser cache is explicitly cleared. Storing the unique ID in the local browser cache may not be persistent across browser applications. For example, the unique ID stored in the local browser cache of a one browser application may not be accessible from another browser application.

[0058] The computing device may determine, at 516, a latitude coordinate and a longitude coordinate of the user computing device. For example, the data received from the browser session may include the latitude and longitude coordinates of the user computing device, as described herein. The computing device may use the latitude and longitude coordinates to track a user. Use of the latitude and longitude coordinates for tracking may improve device and/or network security, for example, by eliminating the need for cookies to track the user.

[0059] The computing device may determine, at 518, a physical address (*e.g.*, a postal address) for the browser session using the location data. The physical address may indicate a postal address at which the user accessed the URL in the browser session. For example, the computing device may generate, at 518, the physical address using a map API (*e.g.*, such as Bing Maps API, Mapbox API, OpenStreetMap API, Leaflet API, OpenLayers API, Google Maps API, and/or another map API). For example, the computing device may translate, at 514, the received latitude and longitude coordinates into the physical address using the map API.

[0060] The computing device may determine an address type (*e.g.*, residential, apartment/condo building, single family home, commercial, and/or the like) based on the physical address. For example, the computing device may determine the address type using a postal service API. The computing device may use the address type to determine a type and/or frequency of notifications sent to the user. The computing device may determine other user information based on the physical address such as a name associated with the user, an age of the user, a gender of the user, demographics associated with the user, and/or psychographics associated with the user. The demographics associated with the user may include race, marital

status, household size, occupation, income, education, and/or living status. The psychographics associated with the user may include personality traits, lifestyles, interests, opinions, beliefs, values, etc. The computing device may determine the type and/or the frequency of notifications sent to the user based on the other information. The computing device may determine the content of the notifications based on the other information.

[0061] At 520, the computing device may associate the generated unique identifier with the determined location data. For example, the computing device may map, at 520, the unique identifier to the location data (*e.g.*, physical address). The mapping between the unique identifier and the location data may enable identification of future visits to the URL by the user. The mapping between the unique identifier and the location data may enable an administrative user to identify who is accessing specific URLs, for example, with or without the use of cookies. For example, the unique identifier and location data may enable convergence of an online and offline footprint for a user.

[0062] The computing device may generate a profile for the user, for example, based on the association between the unique identifier and the location data. The user profile may be used to track a plurality of factors associated with the user and the user's activity. For example, the user profile may track which URLs the user accesses, the frequency with which the user accesses the URL(s), demographics associated with the user, the address(es) associated with the user, etc. For example, the computing device may associate multiple unique identifiers having the same location data with the same user profile. The user profile may be used to generate a targeted marketing campaign. The method 500 may end, at 522.

[0063] FIG. 6 is a flow diagram of an example method 600 that may be implemented by one or more computing devices (*e.g.*, such as the computing devices 230a-230n shown in FIG. 2) to quantify a user's interest in a product. The method 600, or portions thereof, may be performed to enable engagement with the user based on the user's interest in the product. The product may be a vehicle. Engagement with the user may include sending notification(s) to the user, determining one or more advertisements for the user, track service needs for a vehicle owned and/or operated by the user or someone in the user's household, and/or the like. The notification(s) may include emails, text messages, mobile phone notifications, phone calls, advertisements, and/or the like. The method 600, or portions thereof, may be performed at a single computing device or may be

distributed across multiple computing devices (*e.g.*, multiple servers and/or a user device). The method 600, or portions thereof, may be performed to enable users, such as administrative users, to determine that the user has a specific interest in one or more products. The method 600, or portions thereof, may be performed to enable the administrative users to quantify the user's interest in the product(s). The method 600, or portions thereof, may be performed to enable adaptive generation of notifications to the user based on the specific interest in the product(s). The method 600 may comprise instructions that may be stored in memory as computer-readable or machine-readable storage media that may be executed by the one or more computing devices for executing the method 600. The method 600, or portions thereof, may reduce the amount of processing resources used by the computing device during a predetermined period (*e.g.*, day). The method 600, or portions thereof, may improve the functionality of a computer network system (*e.g.*, such as the computing network system 200 shown in FIG. 2) associated with engagement of the user. In addition, the method 600, or portions thereof, may implement a distributed network architecture, as shown in FIG. 2, which may reduce the amount of signaling between a user computing device and one or more administrative computing devices (*e.g.*, such as the computing devices 230a, 230b, 230n shown in FIG. 2) and may reduce the amount of processing resources consumed by the administrative computing device(s). The method 600, or portions thereof, may be combined with the method 300, the method 400, and/or the method 500.

[0064] The method 600 may start, at 602, when a user computing device (*e.g.*, such as computing device 210 shown in FIG. 2) accesses a URL. For example, a user may initialize a browser application on the user computing device and may navigate to the URL within the browser application using a browser session.

[0065] As illustrated in FIG. 6, a computing device (*e.g.*, such as computing device 230a, 230b, or 230n shown in FIG. 2) may identify, at 604, location data associated with anonymous data received via the browser session. For example, the data received from the browser session may include the location data, as described herein. Additionally or alternatively, the computing device may determine the location data using a tracker installed in the browser application on the user computing device. The computing device may determine a physical address (*e.g.*, a postal address) for the browser session using the location data. The physical address may indicate a postal address at which the user accessed the URL in the browser session. For example, the

computing device may generate the physical address using a map API (*e.g.*, such as Bing Maps API, Mapbox API, OpenStreetMap API, Leaflet API, OpenLayers API, Google Maps API, and/or another map API). For example, the computing device may translate received latitude and longitude coordinates into the physical address using the map API.

[0066] The computing device may determine an address type (*e.g.*, residential, apartment/condo building, single family home, commercial, and/or the like) based on the physical address. For example, the computing device may determine the address type using a postal service API. The computing device may use the address type to determine a type and/or frequency of notifications sent to the user. The computing device may determine other user information based on the physical address such as a name associated with the user, an age of the user, a gender of the user, demographics associated with the user, and/or psychographics associated with the user. The demographics associated with the user may include race, marital status, household size, occupation, income, education, living status, and/or housing value. The psychographics associated with the user may include personality traits, lifestyles, interests, opinions, beliefs, values, etc.

[0067] The computing device may generate a profile for the user, for example, using a unique identifier, location data (*e.g.*, one or more addresses), and/or other information. The user profile may be used to track a plurality of factors associated with the user and the user's activity. For example, the user profile may track which URLs the user accesses, the frequency with which the user accesses the URL(s), demographics associated with the user, the address(es) associated with the user, etc. For example, the computing device may associate multiple unique identifiers having the same location data with the same user profile. The user profile may enable generation of a targeted marketing campaign, quantification of a user's interest in one or more products/brands, and/or tracking health of one or more vehicles owned/operated by the user.

[0068] At 606, the computing device may generate a confidence rating for the user. The confidence rating may be a measure (*e.g.*, probability) of the user's interest in a product (*e.g.*, such as purchase readiness). The computing device may generate the confidence rating using an algorithm. The algorithm may incorporate learning such that the algorithm improves (*e.g.*, automatically) as more data is applied to the algorithm. The algorithm may determine the confidence rating using one or more general attributes and/or one or more automobile-specific

attributes. The one or more general attributes may include distance, devices across family/household, unique pages accessed, a recency multiplier, one or more confidential calculations, the physical address type, demographics associated with the user, psychographics associated with the user, the age of the user, the gender of the user, and/or a frequency of URL visits by the user. The one or more automobile-specific attributes may include finance upgrade segment status, lease upgrade segment status, lease term remaining, lease mileage projection, finance term remaining, equity status, mileage of current vehicle, private shopping mode, opened email, and/or automobile wallet utilization. The confidence rating may be associated with one or more discrete decision values (*e.g.*, researching, interested, ready to buy, and/or purchased). Each of the discrete decision values may be associated with respective thresholds of the confidence rating such that each user's confidence rating is associated with one of the discrete decision values for a present confidence rating. The present confidence rating may be displayed on an administrative graphical user interface (GUI) operating on an administrative user device. The GUI may display information for a plurality of users. For each of the plurality of users, the GUI may display the name of the user, a product the user is interested in, the confidence rating, and/or other information associated with the user. The GUI may include a visual indication (*e.g.*, an indicator) of the confidence rating for each of the plurality of users. The GUI may indicate the decision value associated with the present confidence rating.

[0069] At 608, the computing device may send one or more notifications to the user based on the confidence rating for the user. The one or more notifications may include advertisements associated with the product the user is interested in, coupons for the product the user is interested in, queries for questions about the product the user is interested in, and/or the like. The computing device may determine the type and/or the frequency of notifications sent to the user based on the other information (*e.g.*, a name associated with the user, an age of the user, a gender of the user, demographics associated with the user, and/or psychographics associated with the user). The computing device may determine the content of the notifications based on the other information. For example, the computing device may use the confidence rating and/or other information associated with a plurality of users as filtering criteria for a targeted marketing campaign. The filtering criteria may be overlaid on top of the confidence rating, for example, to identify which users to target in the marketing campaign.

[0070] At 610, the computing device may update the confidence rating upon subsequent visits to the URL. The computing device may be configured to identify subsequent return visits by the user to the URL based on the determined physical address, a unique ID stored in the local browser cache, and/or a cookie. For example, the computing device may recognize that another browser session accessing the URL is from the user computing device at the same physical address or another user computing device at the same physical address. When another user computing device at the same physical address accesses the URL, the computing device may determine that that other user computing device is the same user and/or user household. The computing device may store a timestamp and the URL of each subsequent return visit from the physical address and/or browser application. For example, the computing device may create a log of URLs visited by user computing devices associated with a user profile. The log of URLs may track the unique identifier and/or device type associated with each URL visit. When a frequency of visits by the user to the URL increase over a predetermined period, the computing device may determine that the confidence rating has increased for that user. When a frequency of visits by the user to the URL decrease over a predetermined period, the computing device may determine that the confidence rating has decreased for that user. The method 600 may end, at 612.

[0071] FIG. 7 is an example GUI 700 for a vehicle health assessment. The GUI 700 may display various parameters associated with a specific vehicle. The GUI 700 may include an estimated mileage block 702. The estimated mileage block 702 may display and/or accept an input from a car owner/operator of how many miles the vehicle has driven. The GUI 700 may include an estimated payoff block 704. The estimated payoff block 704 may indicate how much debt is still valid for the vehicle. The GUI 700 may include a health score block 706. The health score block may display a health score for the vehicle which may be determined as described herein (*e.g.*, such as at 820 of the method 800 shown in FIG. 8). The GUI 700 may include an age block 708. The age block 708 may display an age of the vehicle. The GUI 700 may include a preventive care rating block 710. The preventative care rating block 710 may indicate compliance of the car owner/operator with a preventative care schedule of maintenance associated with the vehicle. The GUI 700 may include a service history block 712. The service history block 712 may display prior service information for the vehicle.

[0072] FIG. 8 is a flow diagram of an example method 800 that may be implemented by one or more computing devices (*e.g.*, such as the computing devices 230a-230n shown in FIG. 2) to determine a health score associated with a vehicle operated by a user. The method 800, or portions thereof, may be performed to enable engagement with the user based on the vehicle's health score. Engagement with the user may include sending notification(s) to the user, determining one or more advertisements for the user, track service needs for a vehicle owned and/or operated by the user or someone in the user's household, and/or the like. The notification(s) may include emails, text messages, mobile phone notifications, phone calls, advertisements, and/or the like. The method 800, or portions thereof, may be performed at a single computing device or may be distributed across multiple computing devices (*e.g.*, multiple servers and/or an administrative computing device). The method 800, or portions thereof, may be performed to enable users, such as administrative users, to determine that the vehicle requires service. The method 800, or portions thereof, may be performed to enable the administrative users to quantify the overall health (*e.g.*, maintenance) of the vehicle. The method 800, or portions thereof, may be performed to enable adaptive generation of notifications to the user based on the determined health of the vehicle. The method 800 may comprise instructions that may be stored in memory as computer-readable or machine-readable storage media that may be executed by the one or more computing devices for executing the method 800. The method 800, or portions thereof, may reduce the amount of processing resources used by the computing device during a predetermined period (*e.g.*, day). The method 800, or portions thereof, may improve the functionality of a computer network system (*e.g.*, such as the computing network system 200 shown in FIG. 2) associated with engagement of the user. In addition, the method 800, or portions thereof, may implement a distributed network architecture, as shown in FIG. 2, which may reduce the amount of signaling between a user computing device and one or more administrative computing devices (*e.g.*, such as the computing devices 230a, 230b, 230n shown in FIG. 2) and may reduce the amount of processing resources consumed by the administrative computing device(s). The method 800, or portions thereof, may be combined with the method 300, the method 400, method 500, and/or the method 600.

[0073] The method 800 may start, at 802, when a user (*e.g.*, an administrative user) initializes an application on a computing device (*e.g.*, such as computing devices 230a, 230b, 230n shown in FIG. 2).

[0074] At 804, the computing device (*e.g.*, the application) may request and/or receive the information associated with the vehicle (*e.g.*, vehicle information). The computing device may receive, at 804, the vehicle information from the vehicle, from a mobile device (*e.g.*, such as the computing device 210 shown in FIG. 2) in communication with the vehicle, and/or another computing device associated with the vehicle. The computing device may request and/or receive the vehicle information at regular intervals (*e.g.*, daily, weekly, monthly, etc.). Additionally or alternatively, the computing device may request and/or receive the vehicle information when the vehicle is started, when an operator (*e.g.*, owner, lessee, etc.) of the vehicle initializes an application on their mobile device. Additionally or alternatively, the vehicle may send the vehicle information at specific mileage thresholds (*e.g.*, every 100 miles, every 1,000 miles, etc.). Additionally or alternatively, a user of the vehicle may enter the vehicle information into a GUI (*e.g.*, such as the GUI 700 shown in FIG. 7). The GUI may implement, at 804, gamification features that encourage the user to enter the vehicle information. For example, the GUI may incorporate one or more features (*e.g.*, point scoring, competition with other users, reward earning, etc.) that are designed to motivate consistent participation and long-term engagement of the user(s). The computing device may associate the received vehicle information with the vehicle. The computing device may store the received vehicle information, for example, in a local or cloud-based database.

[0075] At 806, the computing device may determine an age of the vehicle and/or a vehicle mileage. The computing device may determine the vehicle age and/or the vehicle mileage based on the vehicle information received at 804. For example, the vehicle age may be determined based on a manufacturing date and/or model year associated with the vehicle. The vehicle information may include a unique identifier of the vehicle (*e.g.*, vehicle identification number (VIN)). The computing device may use the VIN to update the vehicle age. The vehicle information may include the vehicle mileage.

[0076] At 808, the computing device may determine whether the vehicle age is greater than a threshold age, TH_{AGE} . The threshold age TH_{AGE} may be determined based on a previous determined vehicle age and/or a previous vehicle mileage. The computing device may compare, at 808, the vehicle age against a plurality of threshold ages TH_{AGE1} , TH_{AGE2} ... TH_{AGEN} . For

example, the computing device may determine which of the plurality of threshold ages to compare the vehicle age to based on a previously determined vehicle age.

[0077] When the vehicle age is less than the threshold age TH_{AGE} , the computing device may determine, at 810, whether the vehicle mileage is greater than a threshold mileage TH_{MILE} . The threshold mileage TH_{MILE} may be associated with the previously determined vehicle age and/or the threshold age TH_{AGE} . For example, the threshold mileage may define an average mileage for vehicles at the threshold age.

[0078] When the vehicle mileage is less than or equal to the threshold mileage TH_{MILE} , the computing device may determine, at 812, whether there is any stored prior service information associated with the vehicle. The prior service information associated with the vehicle may indicate previous service performed on the vehicle, for example, oil change(s), brake maintenance, other preventative maintenance, and/or corrective service. The owner/operator of the vehicle may enter service information (*e.g.*, such as via the GUI 700 shown in FIG. 7). The computing device may store the owner/operator entered service information, for example, in the local or cloud-based database.

[0079] When there is no prior service information associated with the vehicle, the computing device may generate, at 814, default service information for the vehicle. The default service information may be generated based on manufacturer service schedules for the vehicle (*e.g.*, the make and model of the vehicle). The computing device may query a database for the default service information, for example, using the VIN of the vehicle.

[0080] When the vehicle age is determined, at 808, to be greater than the threshold age TH_{AGE} and/or the vehicle mileage is determined, at 810, to be greater than the threshold mileage TH_{MILE} the computing device may determine, at 816, a health score limit and/or a max health limit. For example, the threshold age TH_{AGE} may be associated with a maximum health score such that a vehicle age greater than the threshold must have a health score that is less than or equal to the maximum health score for that threshold age TH_{AGE} . Additionally or alternatively, the threshold mileage TH_{MILE} may be associated with a maximum health score such that a vehicle mileage greater than the threshold must have a health score that is less than or equal to the maximum health score for that threshold mileage TH_{MILE} .

[0081] At 818, the computing device may identify a last performed service on the vehicle. For example, the last performed service may represent the most recent service (*e.g.*, scheduled/unscheduled, maintenance/corrective, etc.). The last performed service may have been performed at a service shop associated with the dealership. The last performed service may have been performed at a third-party service shop. The computing device, at 818, may enable input of information associated with a last performed service at a third-party service shop. The computing device may determine, at 818, a number of miles driven by the vehicle since the last performed service. The computing device may determine a daily drive rate of the vehicle, for example, based on a date of the most recent service and the number of miles driven by the vehicle since the last performed service. Calculation of the daily drive rate may include a linear fit between odometer readings. Additionally or alternatively, the computing device may receive a daily indication (*e.g.*, from the vehicle) indicating the number of miles driven on that respective day.

[0082] At 820, the computing device may determine a health score for the vehicle. The health score may be a preventive care rating associated with the vehicle. For example, the health score may indicate how consistently the vehicle is serviced with respect to a recommended service schedule. The health score may be determined, at 820, using an algorithm that is based on one or more of the vehicle age, the vehicle mileage, the prior service information associated with the vehicle, and/or the number of miles driven by the vehicle since the last performed service. The algorithm may incorporate learning such that the algorithm improves (*e.g.*, automatically) as more data is applied to the algorithm. The algorithm may compare the vehicle (*e.g.*, the vehicle age, the vehicle mileage, the prior service information, etc.) against other similar vehicles (*e.g.*, of the same make and model) of similar age and/or mileage. For example, the health score may be a relative health of the vehicle when compared to other similar vehicles having similar age and/or mileage. The health score for the vehicle may be determined, at 820, at regular time intervals (*e.g.*, daily, monthly, bi-monthly, etc.) and/or following specific triggers (*e.g.*, mileage thresholds, service performed, etc.). For example, the health score for the vehicle may be determined, at 820, every night. When the health score of the vehicle is below a certain threshold, the computing device may identify an incentive to send to the owner/operator to increase service frequency. The computing device may be configured to display the health score

via a GUI (*e.g.*, such as the GUI 700 shown in FIG. 7). A table depicting example health scores for a vehicle based on various factors is shown in Table 1.

Table 1 - Example Health Score Calculation

Health Score	Vehicle Mileage	Vehicle Age	Last Service	Mileage Since Last Service
A	-	≤ 5 years	≤ 6 months	$\leq 10K$
B	-	≤ 7 years	≤ 12 months	$\leq 10K$
C	-	≥ 3 years	≤ 24 months	$\geq 10K$
D	-	≥ 5 years	> 24 months	$\geq 10K$
F	$> 200K$	≥ 10 years	≥ 12 months	$\geq 10K$

[0083] The computing device may determine a future estimated health (*e.g.*, health score) of the vehicle based on the latest daily drive rate calculation. The future estimated health of the vehicle may be a 6-month projection, projected at lease/note maturity, and/or other vehicle milestones. The future estimated health may be used to identify users/vehicles to target in a marketing campaign. For example, the computing device may determine to notify the user of a current health score of their vehicle and/or send a service coupon based on the future estimated health of the vehicle. The future estimated health may be used to identify vehicles to target for trade-in.

[0084] The computing device may determine whether to send a notification to the owner/operator of the vehicle based on the health score. For example, when the health score is below a predetermined health threshold, the computing device may send a service notification (*e.g.*, reminder and/or suggestion) and/or a service coupon to the owner/operator of the vehicle. The service notification may include a service reminder, a service warning, and/or a service incentive. Additionally or alternatively, the health score of the vehicle is below the predetermined health threshold, the computing device may identify an incentive to send to the owner/operator to increase service frequency. When the health score is above a predetermined health threshold, the computing device may send a marketing (*e.g.*, trade-in) notification to the owner/operator of the vehicle. The marketing notification may include a trade-in value of the

vehicle based on the health score of the vehicle. The marketing notification may suggest one or more vehicles of similar cost, value, and/or monthly payment to the vehicle.

[0085] FIG. 9 is a flow diagram of an example method 900 that may be implemented by one or more computing devices (*e.g.*, such as the computing devices 230a-230n shown in FIG. 2) to update a health score associated with a vehicle operated by a user based on a recently performed service. The method 900, or portions thereof, may be performed to enable engagement with the user based on the vehicle's health score. Engagement with the user may include sending notification(s) to the user, determining one or more advertisements for the user, track service needs for a vehicle owned and/or operated by the user or someone in the user's household, and/or the like. The notification(s) may include emails, text messages, mobile phone notifications, phone calls, advertisements, and/or the like. The method 900, or portions thereof, may be performed at a single computing device or may be distributed across multiple computing devices (*e.g.*, multiple servers and/or an administrative computing device). The method 900, or portions thereof, may be performed to enable users, such as administrative users, to determine that the vehicle requires service. The method 900, or portions thereof, may be performed to enable the administrative users to quantify the overall health (*e.g.*, maintenance) of the vehicle. The method 900, or portions thereof, may be performed to enable adaptive generation of notifications to the user based on the determined health of the vehicle. The method 900 may comprise instructions that may be stored in memory as computer-readable or machine-readable storage media that may be executed by the one or more computing devices for executing the method 900. The method 900, or portions thereof, may reduce the amount of processing resources used by the computing device during a predetermined period (*e.g.*, day). The method 900, or portions thereof, may improve the functionality of a computer network system (*e.g.*, such as the computing network system 200 shown in FIG. 2) associated with engagement of the user. In addition, the method 900, or portions thereof, may implement a distributed network architecture, as shown in FIG. 2, which may reduce the amount of signaling between a user computing device and one or more administrative computing devices (*e.g.*, such as the computing devices 230a, 230b, 230n shown in FIG. 2) and may reduce the amount of processing resources consumed by the administrative computing device(s). The method 900, or portions thereof, may be combined with the method 300, the method 400, method 500, the method 600, and/or the method 800.

[0086] The method 900 may start, at 902, when a user (*e.g.*, an administrative user) initializes an application on a computing device (*e.g.*, such as computing devices 230a, 230b, 230n shown in FIG. 2). For example, the administrative user may initialize a service application, for example, to identify vehicles that need servicing. The service application may enable the administrative user to identify active service customers, recently lost customers, defected customers, and/or never serviced customers. The active service customers may be owners/operators of vehicles that have been serviced by a specific dealer within a predetermined length of time. The recently lost customers may be owners/operators of vehicles that have been serviced by the specific dealer in the past but have not had their respective vehicles serviced by the specific dealer within the last year or two and/or in the most recent two or more consecutive vehicle service intervals. The defected customers may represent customers that are owners/operators of vehicles that have been serviced by the specific dealer in the past; but, have not been serviced by the specific dealer in the last two years. The service application may enable the administrative user to determine whether recently lost customers, defected customers, and/or never serviced customers have visited the dealer's service website and/or accessed a profile associated with their respective vehicle.

[0087] As illustrated in FIG. 9, a computing device (*e.g.*, such as computing device 230a, 230b, or 230n shown in FIG. 2) may identify, at 904, location data associated with a user (*e.g.*, owner/operator of a vehicle) based on anonymous data received via a browser session. For example, the data received from the browser session may include the location data. Additionally or alternatively, the computing device may determine the location data using a cookie installed in the browser application on the user computing device. The computing device may determine a physical address (*e.g.*, a postal address) for the browser session using the location data. The physical address may indicate a postal address at which the user accessed the URL in the browser session. For example, the computing device may generate the physical address using a map API (*e.g.*, such as Bing Maps API, Mapbox API, OpenStreetMap API, Leaflet API, OpenLayers API, Google Maps API, and/or another map API). For example, the computing device may translate received latitude and longitude coordinates into the physical address using the map API. The location data may enable the administrative user to determine whether a customer or prospective customer visited a dealer website anonymously (*e.g.*, without logging in).

[0088] The computing device may generate a profile for the user, for example, based on an association between a unique identifier and the location data. The user profile may be used to track a plurality of factors associated with the user and the user's activity. For example, the user profile may track which URLs the user accesses, the frequency with which the user accesses the URL(s), demographics associated with the user, the address(es) associated with the user, etc. For example, the computing device may associate multiple unique identifiers having the same location data with the same user profile. The user profile may be used to generate a targeted marketing campaign. Additionally or alternatively, the computing device may associate a service profile with an existing user profile.

[0089] At 906, the computing device may determine health scores for a plurality of vehicles. The health scores may be determined, at 906, using an algorithm that is based on one or more of a vehicle age, a vehicle mileage, prior service information associated with the respective vehicle, and/or a number of miles driven by the respective vehicle since the last performed service. The algorithm may compare each of the vehicles (*e.g.*, the vehicle age, the vehicle mileage, the prior service information, etc.) against other similar vehicles (*e.g.*, of the same make and model) of similar age and/or mileage. For example, the health scores may indicate a relative health of the vehicles when compared to other similar vehicles having similar age and/or mileage.

[0090] At 908, the computing device may determine to send notification(s) to the owner(s)/operator(s) of one or more of the vehicles based on the determined health scores. For example, the computing device may send one or more notifications to each of the owners/operators of vehicles having a health score below a predetermined health threshold. The predetermined health threshold may be determined based on a safe operation of the vehicle. The predetermined health threshold may be vehicle make, vehicle model, and/or vehicle year specific. The notifications may include a service notification (*e.g.*, reminder and/or suggestion) and/or a service coupon to the owner(s)/operator(s) of the vehicles with health scores below a predetermined health threshold. The service notification may include a service reminder, a service warning, and/or a service incentive.

[0091] At 910, the computing device may receive confirmation that a service was performed on a vehicle. The confirmation may be received from the vehicle (*e.g.*, the vehicle computer), a user computing device of the owner/operator of the vehicle, and/or another administrative

computing device. Additionally or alternatively, the administrative user may input the service confirmation into the service application for the respective vehicle.

[0092] At 912, the computing device may update the health score of the vehicle, for example, based on the recently performed service. The recently performed service may increase the health score associated with the vehicle. The computing device may update the health score of each of the vehicles following any subsequently performed services for the respective vehicles. The method 900 may end at 914.

[0093] FIG. 10 is a flow diagram of an example method 1000 that may be implemented by one or more computing devices (*e.g.*, such as the computing devices 230a-230n shown in FIG. 2) to determine a probability that a browsing session was initiated in response to watching and/or listening to media associated with a campaign. The method 1000, or portions thereof, may be performed to estimate an effectiveness of the campaign. For example, the method 1000, or portions thereof, may be performed to determine whether a user associated with the browsing session was influenced by media associated with the campaign to initiate the browsing session. The method 1000, or portions thereof, may be performed at a single computing device or may be distributed across multiple computing devices (*e.g.*, multiple servers and/or a user device). The method 1000, or portions thereof, may be performed to enable the administrative users to quantify a likelihood that the user initiated the browser session in response to watching and/or listening to media associated with the campaign. The method 1000 may comprise instructions that may be stored in memory as computer-readable or machine-readable storage media that may be executed by the one or more computing devices for executing the method 1000. The method 1000, or portions thereof, may improve the functionality of a computer network system (*e.g.*, such as the computing network system 200 shown in FIG. 2) associated with engagement of the user. In addition, the method 1000, or portions thereof, may implement a distributed network architecture, as shown in FIG. 2, which may reduce the amount of signaling between a user computing device and one or more administrative computing devices (*e.g.*, such as the computing devices 230a, 230b, 230n shown in FIG. 2) and may reduce the amount of processing resources consumed by the administrative computing device(s).

[0094] The method 1000 may start, at 1002, when a computing device (*e.g.*, such as computing device 210 shown in FIG. 2) receives campaign level data associated with a

campaign. The campaign may comprise one or more messages and/or media that share a theme. For example, the one or more messages and/or media may be associated with a product and/or brand. The one or more messages and/or media may be made available for consumption via mobile technology, television, radio, print, and/or online platforms. It may be desirable to identify whether online activity (*e.g.*, a browser session, traffic to a website, a search query, an online purchase, and/or the like) was initiated by consumption of the one or more messages and/or media associated with the campaign. For example, identifying a likelihood that the online activity was initiated by the consumption of the one or more messages and/or media associated with the campaign may indicate a success of the campaign.

[0095] The campaign may be associated with a time period. For example, the campaign may be active during the time period. The campaign level data may include impression data over the time period. Stated differently, the campaign level data may indicate daily impressions (*e.g.*, daily impression data) over the course of the campaign. The daily impression data may include respective impression proportions of campaign impressions for each of a plurality of dates. A campaign impression may include an instance of media associated with the campaign being watched and/or listened to. For example, the campaign level data may indicate the number of impressions of media associated with the campaign in each of a plurality of sub-periods within the time period. The sub-periods may represent days, portions of a day, and/or the like. A table depicting example daily impression data for a campaign is shown in Table 2.

Table 2 - Example Daily Campaign Impression Data

Date	Impressions	Proportion
July 6	1000	25%
July 7	2000	50%
July 8	1000	25%

[0096] The campaign level data may include daypart blueprint data. The daypart blueprint data may represent aggregate daypart proportions of impressions for a plurality of (*e.g.*, all) campaigns for which campaign level data is available to the computing device. The daypart blueprint data may be updated periodically (*e.g.*, daily, weekly, monthly, *etc.*). The daypart

proportions may indicate respective daypart proportions for the impressions from the plurality of campaigns. For example, the daypart blueprint data may indicate the percentage of impressions in each of a plurality of dayparts. Stated differently, the daypart proportions may include respective impression proportions of campaign impression for each of the plurality of dayparts. The dayparts may represent a pre-determined portion of a day, for example, such as overnight, early morning, daytime, early fringe, prime access, prime time, and/or late fringe. The daypart proportions may indicate when overall streaming habits. The daypart proportions may be used to assign a daypart factor to each of the dayparts. A table depicting example daypart blueprint data for a plurality of campaigns is shown in Table 3.

Table 3 - Example Daypart Blueprint Data

Daypart	Proportion	Min Time	Max Time	Daypart Factor
Overnight	14.26%	12:00 AM	5:59 AM	1.5
Early Morning	19.57%	6:00 AM	8:59 AM	1.6
Daytime	28.18%	9:00 AM	3:59 PM	1.8
Early Fringe	9.19%	4:00 PM	5:59 PM	1.3
Prime Access	9.50%	6:00 PM	7:59 PM	1.3
Prime Time	14.37%	8:00 PM	10:59 PM	1.5
Late Fringe	4.93%	11:00 PM	11:59 PM	1.2

[0097] As illustrated in FIG. 10, a computing device (*e.g.*, such as computing device 230a, 230b, or 230n shown in FIG. 2) may identify, at 1006, a browser session associated with a ZIP code covered by the campaign. For example, the browser session may have been initiated within a specific ZIP code. The campaign may cover (*e.g.*, target) one or more ZIP codes (*e.g.*, devices within the one or more ZIP codes). Each campaign may uniquely identify a set of ZIP codes to cover. The set of ZIP codes may be larger for campaigns aimed at a larger area. For example, local campaigns may cover a smaller area than regional campaigns and national campaigns may cover a larger area than regional campaigns. The computing device may use one or more of the methods disclosed herein to identify, at 1006, the ZIP code associated with the browser session. For example, the computing device may determine location data associated with the browser

session. The computing device may determine a physical address for the browser session using the location data. The computing device may determine which ZIP code in which the physical address is located. The computing device may identify that, at 1006, that the determined ZIP code is covered by the campaign. The computing device may determine, at 1006, that a specific URL was visited during the browsing session. The specific URL may be associated with the campaign (*e.g.*, a product, a brand, a service, *etc.* that is associated with the campaign).

[0098] The computing device may determine, at 1008, whether the browsing session initiated by a search engine or address bar (*e.g.*, entering a URL into a browser address bar). Initiating a browser session via a search engine may be referred to as organic traffic. Initiating a browser session via address bar may be referred to as direct traffic. Organic traffic and direct traffic may indicate that a user initiated the browser session with the intent to visit a specific website or a website associated with a specific product or brand. When the computing device determines, at 1008, that the browsing session was not initiated by a search engine or address bar, the method may return to 1006 to identify another browsing session.

[0099] When the computing device determines, at 1008, that the browsing session was initiated by a search engine or address bar, the computing device may determine, at 1010, a probability that the browsing session was initiated in response to watching and/or listening to media associated with the campaign. For example, the computing device may use the campaign level data to determine the probability that the browsing session was initiated in response to watching and/or listening to media associated with the campaign. The method 1000 may end at 1012.

[00100] FIG. 11 is a flow diagram of an example method 1100 that may be implemented by one or more computing devices (*e.g.*, such as the computing devices 230a-230n shown in FIG. 2) to determine whether a household performed a transaction associated with a campaign. The method 1100, or portions thereof, may be performed to estimate an effectiveness of the campaign. For example, the method 1100, or portions thereof, may be performed to determine whether a user associated with the browsing session was influenced by media associated with the campaign to perform the transaction. The method 1100, or portions thereof, may be performed at a single computing device or may be distributed across multiple computing devices (*e.g.*, multiple servers and/or a user device). The method 1100, or portions thereof, may be

performed to enable the administrative users to quantify a likelihood that the user initiated the browser session and/or performed the transaction in response to watching and/or listening to media associated with the campaign. The method 1100 may comprise instructions that may be stored in memory as computer-readable or machine-readable storage media that may be executed by the one or more computing devices for executing the method 1100. The method 1100, or portions thereof, may improve the functionality of a computer network system (*e.g.*, such as the computing network system 200 shown in FIG. 2) associated with engagement of the user. In addition, the method 1100, or portions thereof, may implement a distributed network architecture, as shown in FIG. 2, which may reduce the amount of signaling between a user computing device and one or more administrative computing devices (*e.g.*, such as the computing devices 230a, 230b, 230n shown in FIG. 2) and may reduce the amount of processing resources consumed by the administrative computing device(s).

[00101] The method 1100 may start, at 1102, when a computing device (*e.g.*, such as computing device 210 shown in FIG. 2) receives campaign level data associated with a campaign. The campaign may comprise one or more messages and/or media that share a theme. For example, the one or more messages and/or media may be associated with a product and/or brand. The one or more messages and/or media may be made available for consumption via mobile technology, television, radio, print, and/or online platforms. It may be desirable to identify whether online activity (*e.g.*, a browser session, traffic to a website, a search query, an online purchase, and/or the like) was initiated by consumption of the one or more messages and/or media associated with the campaign. For example, identifying a likelihood that the online activity was initiated by the consumption of the one or more messages and/or media associated with the campaign may indicate a success of the campaign.

[00102] The campaign may be associated with a time period. For example, the campaign may be active during the time period. The campaign level data may include impression data over the time period. Stated differently, the campaign level data may indicate daily impressions (*e.g.*, daily impression data) over the course of the campaign. For example, the campaign level data may indicate the number of impressions of media associated with the campaign in each of a plurality of sub-periods within the time period. The sub-periods may represent days, portions of

a day, and/or the like. A table depicting example daily impression data for a campaign is shown in Table 2.

[00103] The campaign level data may include daypart blueprint data. The daypart blueprint data may represent aggregate daypart proportions of impressions for a plurality of (*e.g.*, all) campaigns for which campaign level data is available to the computing device. The daypart blueprint data may be updated periodically (*e.g.*, daily, weekly, monthly, *etc.*). The daypart proportions may indicate respective daypart proportions for the impressions from the plurality of campaigns. For example, the daypart blueprint data may indicate the percentage of impressions in each of a plurality of dayparts. Stated differently, the daypart proportions may include respective impression proportions of campaign impression for each of the plurality of dayparts. The dayparts may represent a pre-determined portion of a day, for example, such as overnight, early morning, daytime, early fringe, prime access, prime time, and/or late fringe. The daypart proportions may indicate when overall streaming habits. The daypart proportions may be used to assign a daypart factor to each of the dayparts. A table depicting example daypart blueprint data for a plurality of campaigns is shown in Table 3.

[00104] As illustrated in FIG. 11, a computing device (*e.g.*, such as computing device 230a, 230b, or 230n shown in FIG. 2) may identify, at 1106, a browser session associated with a ZIP code covered by the campaign. For example, the browser session may have been initiated within a specific ZIP code. The campaign may cover (*e.g.*, target) one or more ZIP codes (*e.g.*, devices within the one or more ZIP codes). Each campaign may uniquely identify a set of ZIP codes to cover. The set of ZIP codes may be larger for campaigns aimed at a larger area. For example, local campaigns may cover a smaller area than regional campaigns and national campaigns may cover a larger area than regional campaigns. The computing device may use one or more of the methods disclosed herein to identify, at 1106, the ZIP code associated with the browser session. For example, the computing device may determine location data associated with the browser session. The computing device may determine a physical address for the browser session using the location data. The computing device may determine which ZIP code in which the physical address is located. The computing device may identify that, at 1106, that the determined ZIP code is covered by the campaign. The computing device may determine, at 1106, that a specific

URL was visited during the browsing session. The specific URL may be associated with the campaign (*e.g.*, a product, a brand, a service, *etc.* that is associated with the campaign).

[00105] The computing device may determine, at 1108, whether the browsing session initiated by a search engine or address bar (*e.g.*, entering a URL into a browser address bar). Initiating a browser session via a search engine may be referred to as organic traffic. Initiating a browser session via address bar may be referred to as direct traffic. Organic traffic and direct traffic may indicate that a user initiated the browser session with the intent to visit a specific website or a website associated with a specific product or brand. When the computing device determines, at 1108, that the browsing session was not initiated by a search engine or address bar, the method may return to 1106 to identify another browsing session.

[00106] When the computing device determines, at 1108, that the browsing session was initiated by a search engine or address bar, the computing device may determine, at 1110, a probability that the browsing session was initiated in response to watching and/or listening to media associated with the campaign. For example, the computing device may use the campaign level data to determine the probability that the browsing session was initiated in response to watching and/or listening to media associated with the campaign.

[00107] The computing device may determine, at 1114, whether the household performed a transaction associated with the campaign. For example, the campaign may be associated with a product or brand, as described herein. The computing device may determine, at 1114, whether a user in the household purchased the product. Additionally or alternatively, the campaign may be associated with one or more other transactions that include content available for purchase, content available for streaming, creation of a user account, a subscription service, another type of service, deposited money with a banking service, downloaded an application and/or the like. Determining whether the household performed a transaction associated with the campaign may provide further support for determining a success of the campaign. For example, the determination, at 1114, may be aggregated with similar determinations associated with transactions performed by other users to determine the success of the campaign. The method 1100 may end at 1112.

[00108] FIG. 12 is a flow diagram of an example method 1200 that may be implemented by one or more computing devices (*e.g.*, such as the computing devices 230a-230n shown in FIG. 2) to determine a probability that a browsing session was initiated in response to watching and/or listening to media associated with a campaign. The method 1200, or portions thereof, may be performed to estimate an effectiveness of the campaign. For example, the method 1200, or portions thereof, may be performed to determine whether a user associated with the browsing session was influenced by media associated with the campaign to initiate the browsing session. The method 1200, or portions thereof, may be performed at a single computing device or may be distributed across multiple computing devices (*e.g.*, multiple servers and/or a user device). The method 1200, or portions thereof, may be performed to enable the administrative users to quantify a likelihood that the user initiated the browser session and/or performed the transaction in response to watching and/or listening to media associated with the campaign. The method 1200 may comprise instructions that may be stored in memory as computer-readable or machine-readable storage media that may be executed by the one or more computing devices for executing the method 1200. The method 1200, or portions thereof, may improve the functionality of a computer network system (*e.g.*, such as the computing network system 200 shown in FIG. 2) associated with engagement of the user. In addition, the method 1200, or portions thereof, may implement a distributed network architecture, as shown in FIG. 2, which may reduce the amount of signaling between a user computing device and one or more administrative computing devices (*e.g.*, such as the computing devices 230a, 230b, 230n shown in FIG. 2) and may reduce the amount of processing resources consumed by the administrative computing device(s).

[00109] The method 1200 may start, at 1202, when a computing device (*e.g.*, such as computing device 210 shown in FIG. 2) receives campaign level data associated with a campaign. The campaign may comprise one or more messages and/or media that share a theme. For example, the one or more messages and/or media may be associated with a product and/or brand. The one or more messages and/or media may be made available for consumption via mobile technology, television, radio, print, and/or online platforms. It may be desirable to identify whether online activity (*e.g.*, a browser session, traffic to a website, a search query, an online purchase, and/or the like) was initiated by consumption of the one or more messages and/or media associated with the campaign. For example, identifying a likelihood that the online

activity was initiated by the consumption of the one or more messages and/or media associated with the campaign may indicate a success of the campaign.

[00110] The campaign may be associated with a time period. For example, the campaign may be active during the time period. The campaign level data may include impression data over the time period. Stated differently, the campaign level data may indicate daily impressions (*e.g.*, daily impression data) over the course of the campaign. For example, the campaign level data may indicate the number of impressions of media associated with the campaign in each of a plurality of sub-periods within the time period. The sub-periods may represent days, portions of a day, and/or the like. Example daily impression data for a campaign is shown in Table 2.

[00111] The campaign level data may include daypart blueprint data. The daypart blueprint data may represent aggregate daypart proportions of impressions for a plurality of (*e.g.*, all) campaigns for which campaign level data is available to the computing device. The daypart blueprint data may be updated periodically (*e.g.*, daily, weekly, monthly, *etc.*). The daypart proportions may indicate respective daypart proportions for the impressions from the plurality of campaigns. For example, the daypart blueprint data may indicate the percentage of impressions in each of a plurality of dayparts. Stated differently, the daypart proportions may include respective impression proportions of campaign impression for each of the plurality of dayparts. The dayparts may represent a pre-determined portion of a day, for example, such as overnight, early morning, daytime, early fringe, prime access, prime time, and/or late fringe. The daypart proportions may indicate when overall streaming habits. The daypart proportions may be used to assign a daypart factor to each of the dayparts. A table depicting example daypart blueprint data for a plurality of campaigns is shown in Table 3.

[00112] As illustrated in FIG. 12, a computing device (*e.g.*, such as computing device 230a, 230b, or 230n shown in FIG. 2) may identify, at 1206, a browser session associated with a ZIP code covered by the campaign. For example, the browser session may have been initiated within a specific ZIP code. The campaign may cover (*e.g.*, target) one or more ZIP codes (*e.g.*, devices within the one or more ZIP codes). Each campaign may uniquely identify a set of ZIP codes to cover. The set of ZIP codes may be larger for campaigns aimed at a larger area. For example, local campaigns may cover a smaller area than regional campaigns and national campaigns may cover a larger area than regional campaigns. The computing device may use one or more of the

methods disclosed herein to identify, at 1206, the ZIP code associated with the browser session. For example, the computing device may determine location data associated with the browser session. The computing device may determine a physical address for the browser session using the location data. The computing device may determine which ZIP code in which the physical address is located. The computing device may identify that, at 1206, that the determined ZIP code is covered by the campaign. The computing device may determine, at 1206, that a specific URL was visited during the browsing session. The specific URL may be associated with the campaign (*e.g.*, a product, a brand, a service, *etc.* that is associated with the campaign).

[00113] The computing device may determine, at 1208, a date and a time of day that the browsing session was initiated. For example, the computing device may determine, at 1208, the date and the time of day that the browsing session was used to visit the specific URL. The computing device may analyze browsing session data to determine the date and time of day that the browsing session was initiated (*e.g.*, to visit the specific URL).

[00114] The computing device may determine, at 1210, whether the date the browsing session was initiated is within a time period associated with the campaign. The time period associated with the campaign may be a time period during which the campaign is active. For example, the computing device may determine, at 1210, whether the date the browsing session was used to visit the specific URL within a time period during which the campaign is active. For example, the computing device may compare the date the browsing session was initiated against the dates within the time period (*e.g.*, using the campaign level data). When the date the browsing session was initiated is outside of the time period during which the campaign is active, the method 1200 may return to 1206 to identify another browsing session.

[00115] When the computing device determines, at 1210, that the date the browsing session was initiated is within the time period during which the campaign is active, the computing device may identify, at 1212, a first impression proportion (*e.g.*, a date proportion) for the date the browsing session was initiated. The date proportion may indicate a proportion of campaign impressions associated with the date the browsing session was initiated. For example, the computing device may analyze the campaign level data (*e.g.*, the daily impression data) to determine the date proportion for the date the browsing session was initiated.

[00116] The computing device may identify, at 1214, a second impression proportion (*e.g.*, a daypart proportion) for the time of day the session was initiated. The daypart proportion may indicate a proportion of campaign impressions associated with the time of day (*e.g.*, daypart) associated with the date the browsing session was initiated. The computing device may analyze the campaign level data (*e.g.*, the daypart blueprint data) to identify the daypart proportion for the time of day the browsing session was initiated. The daypart proportions may provide an overall approximation of general streaming habits. That is, the daypart proportions may indicate when users are most likely to stream audio and/or video.

[00117] At 1216, the computing device may determine a probability that the browsing session was initiated in response to watching and/or listening to media associated with the campaign. For example, the computing device may use the date proportion and the daypart proportion to determine, at 1216, the probability that the browsing session was initiated in response to watching and/or listening to media associated with the campaign. The daypart proportion may be associated with a daypart factor. For example, each of the dayparts may be assigned a daypart factor based on the associated proportion. The probability that the browsing session was initiated in response to watching and/or listening to media associated with the campaign may be calculated using Equation 1.

$$\text{probability} = \text{average}(\text{date proportion}, \text{daypart proportion}) * \text{daypart factor} \quad (1)$$

That is, the date proportion and the daypart proportion values may be averaged and then multiplied by the daypart factor (*e.g.*, as shown in Equation 1) to determine, at 1216, the probability that the browsing session was initiated in response to watching and/or listening to media associated with the campaign. The method 1200 may end at 1218.

[00118] FIG. 13 is a flow diagram of an example method 1300 that may be implemented by one or more computing devices (*e.g.*, such as the computing devices 230a-230n shown in FIG. 2) to determine a probability that a browsing session was initiated in response to watching and/or listening to media associated with a campaign. The method 1300, or portions thereof, may be used to affirmatively determine that a user watched and/or listened to one or more instances of media associated with the campaign. The method 1300, or portions thereof, may be performed to estimate an effectiveness of the campaign. For example, the method 1300, or portions thereof,

may be performed to determine whether a user associated with the browsing session was influenced by media associated with the campaign to initiate the browsing session. The method 1300, or portions thereof, may be performed at a single computing device or may be distributed across multiple computing devices (*e.g.*, multiple servers and/or a user device). The method 1300, or portions thereof, may be performed to enable the administrative users to quantify a likelihood that the user initiated the browser session in response to watching and/or listening to media associated with the campaign. The method 1300 may comprise instructions that may be stored in memory as computer-readable or machine-readable storage media that may be executed by the one or more computing devices for executing the method 1300. The method 1300, or portions thereof, may improve the functionality of a computer network system (*e.g.*, such as the computing network system 200 shown in FIG. 2) associated with engagement of the user. In addition, the method 1300, or portions thereof, may implement a distributed network architecture, as shown in FIG. 2, which may reduce the amount of signaling between a user computing device and one or more administrative computing devices (*e.g.*, such as the computing devices 230a, 230b, 230n shown in FIG. 2) and may reduce the amount of processing resources consumed by the administrative computing device(s).

[00119] The method 1300 may start, at 1302, when a computing device (*e.g.*, such as computing device 210 shown in FIG. 2) receives campaign level data associated with a campaign. The campaign may comprise one or more messages and/or media that share a theme. For example, the one or more messages and/or media may be associated with a product and/or brand. The one or more messages and/or media may be made available for consumption via mobile technology, television, radio, print, and/or online platforms. It may be desirable to identify whether online activity (*e.g.*, a browser session, traffic to a website, a search query, an online purchase, and/or the like) was initiated by consumption of the one or more messages and/or media associated with the campaign. For example, identifying a likelihood that the online activity was initiated by the consumption of the one or more messages and/or media associated with the campaign may indicate a success of the campaign.

[00120] The campaign may be associated with a time period. For example, the campaign may be active during the time period. The campaign level data may include impression data over the time period. Stated differently, the campaign level data may indicate daily impressions (*e.g.*,

daily impression data) over the course of the campaign. For example, the campaign level data may indicate the number of impressions of media associated with the campaign in each of a plurality of sub-periods within the time period. The sub-periods may represent days, portions of a day, and/or the like. Example daily impression data for a campaign is shown in Table 2.

[00121] The campaign level data may include daypart blueprint data. The daypart blueprint data may represent aggregate daypart proportions of impressions for a plurality of (*e.g.*, all) campaigns for which campaign level data is available to the computing device. The daypart blueprint data may be updated periodically (*e.g.*, daily, weekly, monthly, *etc.*). The daypart proportions may indicate respective daypart proportions for the impressions from the plurality of campaigns. For example, the daypart blueprint data may indicate the percentage of impressions in each of a plurality of dayparts. Stated differently, the daypart proportions may include respective impression proportions of campaign impression for each of the plurality of dayparts. The dayparts may represent a pre-determined portion of a day, for example, such as overnight, early morning, daytime, early fringe, prime access, prime time, and/or late fringe. The daypart proportions may indicate when overall streaming habits. The daypart proportions may be used to assign a daypart factor to each of the dayparts. A table depicting example daypart blueprint data for a plurality of campaigns is shown in Table 3.

[00122] As illustrated in FIG. 13, a computing device (*e.g.*, such as computing device 230a, 230b, or 230n shown in FIG. 2) may identify, at 1306, a browser session associated with a ZIP code covered by the campaign. For example, the browser session may have been initiated within a specific ZIP code. The campaign may cover (*e.g.*, target) one or more ZIP codes (*e.g.*, devices within the one or more ZIP codes). Each campaign may uniquely identify a set of ZIP codes to cover. The set of ZIP codes may be larger for campaigns aimed at a larger area. For example, local campaigns may cover a smaller area than regional campaigns and national campaigns may cover a larger area than regional campaigns. The computing device may use one or more of the methods disclosed herein to identify, at 1306, the ZIP code associated with the browser session. For example, the computing device may determine location data associated with the browser session. The computing device may determine a physical address for the browser session using the location data. The computing device may determine which ZIP code in which the physical address is located. The computing device may identify that, at 1306, that the determined ZIP

code is covered by the campaign. The computing device may determine, at 1306, that a specific URL was visited during the browsing session. The specific URL may be associated with the campaign (*e.g.*, a product, a brand, a service, *etc.* that is associated with the campaign).

[00123] The computing device may determine, at 1308, whether the household (*e.g.*, a user in the household) initiated a browsing session within a predefined time of consuming media associated with the campaign. The computing device may identify that a user consumed media associated with a campaign. The computing device may determine a household for the user, as described herein. The computing device may then search for any browsing sessions initiated by the user or another user in the same household after the user consumed the media. The computing device may identify whether the browsing session is associated with the campaign. For example, the browsing session may be associated with the campaign when the website visited and/or searched is related to a product, brand, service, *etc.* promoted by the campaign.

[00124] For example, the computing device may determine, at 1308, one or more browsing sessions initiated by one or more users in the household identified, at 1306. The computing device may determine, at 1308, whether any of the one or more browsing sessions were initiated within a predefined time of the respective user consuming media associated with the campaign. For example, the computing may determine a time at which the respective user consumed the media. The predefined time may represent a time represent a short-term memory period of an average person. For example, the predefined time may represent a period of time to which an activity performed by a user can be attributed to media consumed by the user. The predefined time may be based on brand recall and decaying probability of the user taking action after consuming media. For example, the predefined time may be based on a length of time at which a user's memory (*e.g.*, impact) of the media has decayed below a threshold (*e.g.*, an impact threshold). As the period of time between the consumption of media and the activity increases, it becomes more difficult to accurately attribute the activity with the consumption of the media. When a browsing session is initiated within the predefined time, a confidence that the activity is attributable to the consumed media is greater than when the activity is performed outside the predefined time. When the computing device determines, at 1308, that the browsing session was initiated outside (*e.g.*, after) the predefined time, the method 1300 may return to 1306 to identify another browsing session.

[00125] When the household initiates the browsing session within a predefined time of consuming media associated with the campaign, the computing device may determine, at 1310, whether the browsing session initiated by a search engine or address bar (*e.g.*, entering a URL into a browser address bar). Initiating a browser session via a search engine may be referred to as organic traffic. Initiating a browser session via address bar may be referred to as direct traffic. Organic traffic and direct traffic may indicate that a user initiated the browser session with the intent to visit a specific website or a website associated with a specific product or brand. When the computing device determines, at 1310, that the browsing session was not initiated by a search engine or address bar, the method 1300 may return to 1306 to identify another browsing session.

[00126] When the computing device determines, at 1310, that the browsing session was initiated by a search engine or address bar, the computing device may determine, at 1312, a probability that the browsing session was initiated in response to watching and/or listening to media associated with the campaign. For example, the computing device may use the campaign level data to determine the probability that the browsing session was initiated in response to watching and/or listening to media associated with the campaign. The probability determined, at 1312, may be based on a time delay between watching and/or listening to the media associated with the campaign and initiation of the browsing session. The longer the user waits to initiate the browsing session, the lower the probability that the browsing session was initiated in response to the user watching and/or listening to the media associated with the campaign. For example, the probability may be determined, at 1312, based on an amount of time delay from when the media associated with the campaign was watched and/or listened to. An example probability time decay for a plurality of time delays is shown in Table 4.

Table 4 – Example Probability Time Decay

Time Delay (hours)	Traditional Cable	Cord Cutter
1	99.00%	65.34%
2	97.00%	64.02%
3	95.00%	62.70%
4	93.00%	61.38%
5	90.00%	59.40%
6	87.00%	57.42%
7	82.00%	54.12%
8	77.00%	50.82%
9	70.00%	46.20%
10	57.00%	37.62%
11	40.00%	26.40%
12	15.00%	9.90%

As shown in Table 4, the time delay may result in a non-linear relationship with the probability. The non-linear relationship may depend on whether the user (*e.g.*, or the user's household) is a traditional cable television customer or is a cord-cutter customer with a streaming television service. For example, the probability at each of a plurality of time delays may be adjusted by a first time decay factor when the household is a traditional cable television customer and a second time decay factor when the household is a cord-cutter customer. Stated differently, each hour threshold in time delay may be associated with a traditional time decay factor and a cord-cutter time decay factor. The respective time decay factors may represent the respective probability, for the respective time delay household customer type combination, that the user initiated the browsing session in response to watching and/or listening to the media associated with the campaign. The computing device may determine, at 1312, the probability that the browsing session was initiated in response to watching and/or listening to media associated with the campaign using time delay data, for example, as shown in Table 4. The method 1300 may end at 1312.

[00127] FIG. 14 is a flow diagram of an example method 1400 that may be implemented by one or more computing devices (*e.g.*, such as the computing devices 230a-230n shown in FIG. 2) to determine a probability that a browsing session was initiated in response to watching and/or listening to media associated with a campaign. The method 1400, or portions thereof, may be performed to estimate an effectiveness of the campaign. The method 1400, or portions thereof, may affirmatively determine that a user watched and/or listened to media associated with the campaign. For example, the method 1400, or portions thereof, may be performed to determine whether a user associated with the browsing session was influenced by media associated with the campaign to initiate the browsing session. The method 1400, or portions thereof, may be performed at a single computing device or may be distributed across multiple computing devices (*e.g.*, multiple servers and/or a user device). The method 1400, or portions thereof, may be performed to enable the administrative users to quantify a likelihood that the user initiated the browser session in response to watching and/or listening to media associated with the campaign. The method 1400 may comprise instructions that may be stored in memory as computer-readable or machine-readable storage media that may be executed by the one or more computing devices for executing the method 1400. The method 1400, or portions thereof, may improve the functionality of a computer network system (*e.g.*, such as the computing network system 200 shown in FIG. 2) associated with engagement of the user. In addition, the method 1400, or portions thereof, may implement a distributed network architecture, as shown in FIG. 2, which may reduce the amount of signaling between a user computing device and one or more administrative computing devices (*e.g.*, such as the computing devices 230a, 230b, 230n shown in FIG. 2) and may reduce the amount of processing resources consumed by the administrative computing device(s).

[00128] The method 1400 may start, at 1402, when a computing device (*e.g.*, such as computing device 210 shown in FIG. 2) receives campaign level data associated with a campaign. The campaign may comprise one or more messages and/or media that share a theme. For example, the one or more messages and/or media may be associated with a product and/or brand. The one or more messages and/or media may be made available for consumption via mobile technology, television, radio, print, and/or online platforms. It may be desirable to identify whether online activity (*e.g.*, a browser session, traffic to a website, a search query, an online purchase, and/or the like) was initiated by consumption of the one or more messages

and/or media associated with the campaign. For example, identifying a likelihood that the online activity was initiated by the consumption of the one or more messages and/or media associated with the campaign may indicate a success of the campaign.

[00129] The campaign may be associated with a time period. For example, the campaign may be active during the time period. The campaign level data may include impression data over the time period. Stated differently, the campaign level data may indicate daily impressions (*e.g.*, daily impression data) over the course of the campaign. For example, the campaign level data may indicate the number of impressions of media associated with the campaign in each of a plurality of sub-periods within the time period. The sub-periods may represent days, portions of a day, and/or the like. Example daily impression data for a campaign is shown in Table 2.

[00130] The campaign level data may include daypart blueprint data. The daypart blueprint data may represent aggregate daypart proportions of impressions for a plurality of (*e.g.*, all) campaigns for which campaign level data is available to the computing device. The daypart blueprint data may be updated periodically (*e.g.*, daily, weekly, monthly, *etc.*). The daypart proportions may indicate respective daypart proportions for the impressions from the plurality of campaigns. For example, the daypart blueprint data may indicate the percentage of impressions in each of a plurality of dayparts. Stated differently, the daypart proportions may include respective impression proportions of campaign impression for each of the plurality of dayparts. The dayparts may represent a pre-determined portion of a day, for example, such as overnight, early morning, daytime, early fringe, prime access, prime time, and/or late fringe. The daypart proportions may indicate when overall streaming habits. The daypart proportions may be used to assign a daypart factor to each of the dayparts. A table depicting example daypart blueprint data for a plurality of campaigns is shown in Table 3.

[00131] As illustrated in FIG. 14, a computing device (*e.g.*, such as computing device 230a, 230b, or 230n shown in FIG. 2) may identify, at 1406, a browser session associated with a ZIP code covered by the campaign. For example, the browser session may have been initiated within a specific ZIP code. The campaign may cover (*e.g.*, target) one or more ZIP codes (*e.g.*, devices within the one or more ZIP codes). Each campaign may uniquely identify a set of ZIP codes to cover. The set of ZIP codes may be larger for campaigns aimed at a larger area. For example, local campaigns may cover a smaller area than regional campaigns and national campaigns may

cover a larger area than regional campaigns. The computing device may use one or more of the methods disclosed herein to identify, at 1406, the ZIP code associated with the browser session. For example, the computing device may determine location data associated with the browser session. The computing device may determine a physical address for the browser session using the location data. The computing device may determine which ZIP code in which the physical address is located. The computing device may identify that, at 1406, that the determined ZIP code is covered by the campaign. The computing device may determine, at 1406, that a specific URL was visited during the browsing session. The specific URL may be associated with the campaign (*e.g.*, a product, a brand, a service, *etc.* that is associated with the campaign).

[00132] The computing device may determine, at 1408, whether the household (*e.g.*, a user in the household) initiated a browsing session within a predefined time of consuming media associated with the campaign. The computing device may identify that a user consumed media associated with a campaign. The computing device may determine a household for the user, as described herein. The computing device may then search for any browsing sessions initiated by the user or another user in the same household after the user consumed the media. The computing device may identify whether the browsing session is associated with the campaign. For example, the browsing session may be associated with the campaign when the website visited and/or searched is related to a product, brand, service, *etc.* promoted by the campaign.

[00133] For example, the computing device may determine, at 1408, one or more browsing sessions initiated by one or more users in the household identified, at 1406. The computing device may determine, at 1408, whether any of the one or more browsing sessions were initiated within a predefined time of the respective user consuming media associated with the campaign. For example, the computing may determine a time at which the respective user consumed the media. The predefined time may represent a time represent a short-term memory period of an average person. For example, the predefined time may represent a period of time to which an activity performed by a user can be attributed to media consumed by the user. When a browsing session is initiated within the predefined time, a confidence that the activity is attributable to the consumed media is greater than when the activity is performed outside the predefined time. When the computing device determines, at 1408, that the browsing session was initiated outside

(*e.g.*, after) the predefined time, the method 1400 may return to 1406 to identify another browsing session.

[00134] When the household initiates the browsing session within a predefined time of consuming media associated with the campaign, the computing device may determine, at 1410, whether the browsing session initiated by a search engine or address bar (*e.g.*, entering a URL into a browser address bar). Initiating a browser session via a search engine may be referred to as organic traffic. Initiating a browser session via address bar may be referred to as direct traffic. Organic traffic and direct traffic may indicate that a user initiated the browser session with the intent to visit a specific website or a website associated with a specific product or brand. When the computing device determines, at 1410, that the browsing session was not initiated by a search engine or address bar, the method 1400 may return to 1406 to identify another browsing session.

[00135] When the computing device determines, at 1410, that the browsing session was initiated by a search engine or address bar, the computing device may determine, at 1412, a probability that the browsing session was initiated in response to watching and/or listening to media associated with the campaign. For example, the computing device may use the campaign level data to determine the probability that the browsing session was initiated in response to watching and/or listening to media associated with the campaign. The probability determined, at 1412, may be based on a time delay between watching and/or listening to the media associated with the campaign and initiation of the browsing session. The longer the user waits to initiate the browsing session, the lower the probability that the browsing session was initiated in response to the user watching and/or listening to the media associated with the campaign. For example, the probability may be determined, at 1412, based on an amount of time delay from when the media associated with the campaign was watched and/or listened to. An example probability time decay for a plurality of time delays is shown in Table 4.

[00136] As shown in Table 4, the time delay may result in a non-linear relationship with the probability. The non-linear relationship may depend on whether the user (*e.g.*, or the user's household) is a traditional cable television customer or is a cord-cutter customer with a streaming television service. For example, the probability at each of a plurality of time delays may be adjusted by a first time decay factor when the household is a traditional cable television customer and a second time decay factor when the household is a cord-cutter customer. Stated differently,

each hour threshold in time delay may be associated with a traditional time decay factor and a cord-cutter time decay factor. The respective time decay factors may represent the respective probability, for the respective time delay household customer type combination, that the user initiated the browsing session in response to watching and/or listening to the media associated with the campaign. The computing device may determine, at 1412, the probability that the browsing session was initiated in response to watching and/or listening to media associated with the campaign using time delay data, for example, as shown in Table 4.

[00137] The computing device may determine, at 1414, whether the household is associated with any other browsing sessions. For example, the computing device may determine, at 1414, whether any users in the household initiated any other browsing sessions that are associated with the campaign. For example, the user who initiated the browsing session may initiate another browsing session to revisit a URL (*e.g.*, the specific URL), visit a related URL, and/or visit another URL associated with the campaign. Additionally or alternatively, another member of the same household as the user may initiate another browsing session to visit the URL (*e.g.*, the specific URL) that the user visited, visit a related URL, and/or visit another URL associated with the campaign. For example, the user who initiated the initial browsing session determined at 1408 may discuss the URL (*e.g.*, the specific URL), the product, the service, etc. with another member of their household which may result in the other member of the household initiating a browsing session, for example, to visit the URL (*e.g.*, the specific URL) and/or research the product, the service, etc. When the computing device identifies that the household is associated with one or more other browsing sessions associated with the campaign, the computing device may adjust a confidence rating, as described herein. For example, additional household browsing sessions associated with the campaign may increase the confidence rating associated with the product, service, etc.

[00138] The computing device may determine, at 1416, whether the household performed a transaction associated with the campaign. For example, the campaign may be associated with a product or brand, as described herein. The computing device may determine, at 1416, whether a user in the household purchased the product. Additionally or alternatively, the campaign may be associated with one or more other transactions that include content available for purchase, content available for streaming, a subscription service, another type of service, deposited money

with a banking service, downloaded an application and/or the like. Determining whether the household performed a transaction associated with the campaign may provide further support for determining a success of the campaign. For example, the determination, at 1416, may be aggregated with similar determinations associated with transactions performed by other users to determine the success of the campaign. The method 1400 may end at 1412.

[00139] FIG. 15 is a flow diagram of an example method 1500 that may be implemented by one or more computing devices (*e.g.*, such as the computing devices 230a-230n shown in FIG. 2) to associate a unique identifier with a physical address associated with a user and then determine a probability that that user initiated a browser session in response to watching and/or listening media associated with a campaign. The method 1500, or portions thereof, may be performed to enable engagement with the user based on one or more visits to a URL. Engagement with the user may include sending notification(s) to the user, determining one or more advertisements for the user, track service needs for a vehicle operated by the user or someone in the user's household, and/or the like. The notification(s) may include emails, text messages, mobile phone notifications, phone calls, advertisements, and/or the like. The method 1500, or portions thereof, may be performed to estimate an effectiveness of the campaign. For example, the method 1500, or portions thereof, may be performed to determine whether a user associated with the browsing session was influenced by media associated with the campaign to initiate the browsing session. The method 1500, or portions thereof, may be performed at a single computing device or may be distributed across multiple computing devices (*e.g.*, multiple servers and/or a user device). The method 1500, or portions thereof, may be performed to enable users, such as administrative users, to determine that the user has a specific interest in one or more products. The method 1500, or portions thereof, may be performed to enable the administrative users to quantify the user's interest in the product(s). The method 1500, or portions thereof, may be performed to enable adaptive generation of notifications to the user based on the specific interest in the product(s) and/or the physical address associated with the user. The method 1500, or portions thereof, may reduce the amount of processing resources used by the computing device during a predetermined period (*e.g.*, day). The method 1500 may comprise instructions that may be stored in memory as computer-readable or machine-readable storage media that may be executed by the one or more computing devices for executing the method 1500. The method 1500, or portions thereof, may improve the functionality of a computer network system (*e.g.*, such as the

computing network system 200 shown in FIG. 2) associated with engagement of the user. In addition, the method 1500, or portions thereof, may implement a distributed network architecture, as shown in FIG. 2, which may reduce the amount of signaling between a user computing device and one or more administrative computing devices (*e.g.*, such as the computing devices 230a, 230b, 230n shown in FIG. 2) and may reduce the amount of processing resources consumed by the administrative computing device(s). The method 1500, or portions thereof, may enable tracking of a user without the use of tracking cookies.

[00140] The method 1500 may start, at 1502, when a user computing device (*e.g.*, such as computing device 210 shown in FIG. 2) accesses a URL. For example, a user may initialize a browser application on the user computing device and may navigate to the URL within the browser application using a browser session.

[00141] As illustrated in FIG. 15, a computing device (*e.g.*, such as computing device 230a, 230b, or 230n shown in FIG. 2) may receive, at 1504, data from the browser session on the user computing device. The computing device may be associated with the URL. For example, the computing device may be a server that administers and/or manages a resource associated with the URL. The data may be associated with the user, the user computing device, and/or the browser application associated with the browser session. The data may be anonymous data (*e.g.*, data that includes no personally identifiable information associated with the user). The anonymous data may include a time, a date, a webpage URL, a referring URL, a browser type, a language, an IP address, and/or location data. The computing device may determine a device type based on the browser type. For example, the computing device may determine whether the user computing device is a mobile device based on the browser type. The location data may include a latitude coordinate, a longitude coordinate, and/or a device accuracy indication. The device accuracy indication may indicate the accuracy associated with the user computing device's measurements of the latitude coordinate and the longitude coordinate. For example, the device accuracy indication may indicate the accuracy of the user computing device's GPS (*e.g.*, such as the GPS 114 shown in FIG. 1). The device accuracy may depend on the device type. For example, a mobile device may indicate a device accuracy of approximately 2 meters or less and a computer that accesses the URL via a router may indicate a device accuracy of approximately 70 meters. The anonymous data may be included in a header (*e.g.*, a HTTP

request header) received from the user computing device, included in the IP address of the user computing device, included in scripts at the application-level, etc.

[00142] The computing device may determine, at 1506, whether there is a unique identifier that is associated with the user (*e.g.*, the user computing device, the browser, and/or the browser session) stored on the computing device. The computing device may determine that there is no unique identifier associated with the user computing device when there is no location data stored for the user computing device. For example, the computing device may access a database or other storage location that maintains a mapping of unique identifier to a browser session, a user computing device, and/or location data. Additionally or alternatively, the computing device may determine whether there is a unique identifier for associated with the user based on presence of a tracker (*e.g.*, cookie) installed in the browser application on the user computing device. The tracker may include the unique identifier associated with the user. The tracker may have been installed in the user's browser application (*e.g.*, by the computing device) during a previous visit to the URL via the user's browser application, for example, if the user opted-in to location tracking, as described herein. When the computing device determines, at 1506, that a unique ID is assigned to the browser, the method 1500 may proceed to 1522.

[00143] When the computing device determines that there is no unique identifier assigned to the user, the computing device may be configured to generate, at 1508, a unique identifier for the user. The unique identifier may be generated randomly. The unique identifier may be universally unique. That is, the unique identifier may be unique for all browsers, all device types, all locations, etc. Alternatively, the unique identifier may be parsed from the data received in the browser session. Stated differently, the computing device may determine the unique identifier for the user based on the data received, at 1504, via the browser session.

[00144] The computing device may determine, at 1510, whether the user opted-in to location tracking. For example, the user may be asked to opt-in to location tracking when accessing the URL. The user may respond to a prompt by opting in or opting out to location tracking.

[00145] When the user opts-in to location tracking, the computing device may install, at 1510 a tracker (*e.g.*, a cookie) in the browser application on the user computing device. The cookie may be configured to enable the computing device to retrieve geo-location data from the user

computing device. The cookie may enable the computing device to recognize return visits by the user computing device. The cookie (*e.g.*, a tracking cookie, browser cookie, HTTP cookie, etc.) may include a small string or segment of text that may be transmitted to the user computing device and stored at the user computing device by a browser application. For example, the cookie may include one or more name-value pairs containing bits of information such as, user preferences, an identifier (*e.g.*, the unique ID assigned at 1508) for a server-based user session, and/or other data used by the computing device (*e.g.*, a server and/or website). The cookie may be used for authenticating, session tracking (*e.g.*, state maintenance), and/or for tracking specific information about a user, such as site preferences, and/or to maintain data related to the user and/or user computing device during navigation. The cookie may be sent in an HTTP header by the computing device to the browser application at the user computing device. The cookie may be sent back to the computing unchanged by the browser application, for example, each time the browser application accesses the URL, introducing state into what may be otherwise stateless HTTP transactions. The computing device may set the cookie at the user computing device in response to a request for a target website (*e.g.*, the URL), the computing device may generate and transmit an HTTP response that includes an HTTP header that includes the parameters for the cookie (*e.g.*, in the form of text) and/or code (*e.g.*, Set-Cookie) requesting the browser application to set the cookie based on the parameters in the HTTP header.

[00146] When the user opts-out of location tracking, the computing device may store, at 1514, a unique ID (*e.g.*, the unique ID assigned at 1508) in a local cache of the user computing device (*e.g.*, of the browser). The unique ID may be stored in the local browser cache, for example, even if the user computing device does not allow cookies (*e.g.*, full cookies). Storing the unique ID in the local browser cache may enable the computing device to recognize return visits by the user computing device via the browser application. The unique ID may be used for authenticating, session tracking (*e.g.*, state maintenance), and/or for tracking specific information about a user, such as site preferences, and/or to maintain data related to the user and/or user computing device during navigation. The unique ID may be sent in an HTTP header by the computing device to the browser application at the user computing device. The computing device may store the unique ID in the local browse cache at the user computing device in response to a request for a target website (*e.g.*, the URL). The user computing device may store the unique ID as key/value (*e.g.*, string to string) in the local browser cache. The unique ID may

enable persistence across browser sessions. For example, the unique ID may be recognizable in subsequent browser sessions. The unique ID may remain in the local browser cache, for example, until the local browser cache is explicitly cleared. Storing the unique ID in the local browser cache may not be persistent across browser applications. For example, the unique ID stored in the local browser cache of a one browser application may not be accessible from another browser application.

[00147] The computing device may determine, at 1516, a latitude coordinate and a longitude coordinate of the user computing device. For example, the data received from the browser session may include the latitude and longitude coordinates of the user computing device, as described herein. The computing device may use the latitude and longitude coordinates to track a user. Use of the latitude and longitude coordinates for tracking may improve device and/or network security, for example, by eliminating the need for cookies to track the user.

[00148] The computing device may determine, at 1518, a physical address (*e.g.*, a postal address) for the browser session using the location data. The physical address may indicate a postal address at which the user accessed the URL in the browser session. For example, the computing device may generate, at 1518, the physical address using a map API (*e.g.*, such as Bing Maps API, Mapbox API, OpenStreetMap API, Leaflet API, OpenLayers API, Google Maps API, and/or another map API). For example, the computing device may translate, at 1514, the received latitude and longitude coordinates into the physical address using the map API.

[00149] The computing device may determine an address type (*e.g.*, residential, apartment/condo building, single family home, commercial, and/or the like) based on the physical address. For example, the computing device may determine the address type using a postal service API. The computing device may use the address type to determine a type and/or frequency of notifications sent to the user. The computing device may determine other user information based on the physical address such as a name associated with the user, an age of the user, a gender of the user, demographics associated with the user, and/or psychographics associated with the user. The demographics associated with the user may include race, marital status, household size, occupation, income, education, and/or living status. The psychographics associated with the user may include personality traits, lifestyles, interests, opinions, beliefs, values, etc. The computing device may determine the type and/or the frequency of notifications

sent to the user based on the other information. The computing device may determine the content of the notifications based on the other information.

[00150] At 1520, the computing device may associate the generated unique identifier with the determined location data. For example, the computing device may map, at 1520, the unique identifier to the location data (*e.g.*, physical address). The mapping between the unique identifier and the location data may enable identification of future visits to the URL by the user. The mapping between the unique identifier and the location data may enable an administrative user to identify who is accessing specific URLs, for example, with or without the use of cookies. For example, the unique identifier and location data may enable convergence of an online and offline footprint for a user.

[00151] The computing device may generate a profile for the user, for example, based on the association between the unique identifier and the location data. The user profile may be used to track a plurality of factors associated with the user and the user's activity. For example, the user profile may track which URLs the user accesses, the frequency with which the user accesses the URL(s), demographics associated with the user, the address(es) associated with the user, etc. For example, the computing device may associate multiple unique identifiers having the same location data with the same user profile. The user profile may be used to generate a targeted marketing campaign. When the unique ID is associated, at 1520, to the identified address, the method 1500 may proceed to 1522.

[00152] The computing device may determine, at 1522, whether the address associated with the unique ID is within a ZIP code covered by the campaign. For example, the browser session may have been initiated within a specific ZIP code. The campaign may cover (*e.g.*, target) one or more ZIP codes (*e.g.*, devices within the one or more ZIP codes). Each campaign may uniquely identify a set of ZIP codes to cover. The set of ZIP codes may be larger for campaigns aimed at a larger area. For example, local campaigns may cover a smaller area than regional campaigns and national campaigns may cover a larger area than regional campaigns. The computing device may use one or more of the methods disclosed herein to determine, at 1522, whether the address associated with the unique ID is within a ZIP code covered by the campaign. When the computing device determines, at 1522, that the address is within a ZIP code covered by the campaign, the method 1500 may proceed to 1524. When the computing device

determines, at 1522, that the address is within a ZIP code not covered by the campaign, the method 1500 may proceed to 1528.

[00153] The computing device may determine, at 1524, whether the browsing session initiated by a search engine or address bar (*e.g.*, entering a URL into a browser address bar). Initiating a browser session via a search engine may be referred to as organic traffic. Initiating a browser session via address bar may be referred to as direct traffic. Organic traffic and direct traffic may indicate that a user initiated the browser session with the intent to visit a specific website or a website associated with a specific product or brand. When the computing device determines, at 1524, that the browsing session was not initiated by a search engine or address bar, the method may proceed to 1528.

[00154] When the computing device determines, at 1524, that the browsing session was initiated by a search engine or address bar, the computing device may determine, at 1526, a probability that the browsing session was initiated in response to watching and/or listening to media associated with the campaign. For example, the computing device may use the campaign level data to determine the probability that the browsing session was initiated in response to watching and/or listening to media associated with the campaign. The method 1500 may end, at 1528.

[00155] FIG. 16 is a flow diagram illustrating an example method 1600 that may be implemented by one or more computing devices (*e.g.*, such as the computing devices 230a-230n shown in FIG. 2) for associating a unique identifier with a physical address associated with a user and then determining when to send notifications to the user. The method 1600, or portions thereof, may be performed to enable engagement with the user based on one or more visits to a URL. Engagement with the user may include sending notification(s) to the user, determining one or more advertisements for the user, track service needs for a vehicle operated by the user or someone in the user's household, and/or the like. The notification(s) may include emails, text messages, mobile phone notifications, phone calls, advertisements, and/or the like. The method 1600, or portions thereof, may be performed at a single computing device or may be distributed across multiple computing devices (*e.g.*, multiple servers and/or a user device). The method 1600, or portions thereof, may be performed to enable users, such as administrative users, to determine that the user has a specific interest in one or more products. The method 1600, or

portions thereof, may be performed to enable the administrative users to quantify the user's interest in the product(s). The method 1600, or portions thereof, may be performed to enable adaptive generation of notifications to the user based on the specific interest in the product(s) and/or the physical address associated with the user. The method 1600, or portions thereof, may reduce the amount of processing resources used by the computing device during a predetermined period (*e.g.*, day). The method 1600 may comprise instructions that may be stored in memory as computer-readable or machine-readable storage media that may be executed by the one or more computing devices for executing the method 1600. The method 1600, or portions thereof, may improve the functionality of a computer network system (*e.g.*, such as the computing network system 200 shown in FIG. 2) associated with engagement of the user. In addition, the method 1600, or portions thereof, may implement a distributed network architecture, as shown in FIG. 2, which may reduce the amount of signaling between a user computing device and one or more administrative computing devices (*e.g.*, such as the computing devices 230a, 230b, 230n shown in FIG. 2) and may reduce the amount of processing resources consumed by the administrative computing device(s). The method 1600, or portions thereof, may enable tracking of a user without the use of tracking cookies.

[00156] The method 1600 may start, at 1602, when a user computing device (*e.g.*, such as computing device 210 shown in FIG. 2) accesses a URL. For example, a user may initialize a browser application on the user computing device and may navigate to the URL within the browser application using a browser session.

[00157] As illustrated in FIG. 16, a computing device (*e.g.*, such as computing device 230a, 230b, or 230n shown in FIG. 2) may receive, at 1604, data from the browser session on the user computing device. The computing device may be associated with the URL. For example, the computing device may be a server that administers and/or manages a resource associated with the URL. The data may be associated with the user, the user computing device, and/or the browser application associated with the browser session. The data may be anonymous data (*e.g.*, data that includes no personally identifiable information associated with the user) associated with the browser session. The anonymous data may include a time, a date, a webpage URL, a referring URL, a browser type, a language, an IP address, and/or location data. The computing device may determine a device type based on the browser type. For example, the computing

device may determine whether the user computing device is a mobile device based on the browser type. The location data may include a latitude coordinate, a longitude coordinate, and/or a device accuracy indication. The device accuracy indication may indicate the accuracy associated with the user computing device's measurements of the latitude coordinate and the longitude coordinate. For example, the device accuracy indication may indicate the accuracy of the user computing device's GPS (*e.g.*, such as the GPS 114 shown in FIG. 1). The device accuracy may depend on the device type. For example, a mobile device may indicate a device accuracy of approximately 2 meters or less and a computer that accesses the URL via a router may indicate a device accuracy of approximately 70 meters. The anonymous data may be included in a header (*e.g.*, a HTTP request header) received from the user computing device, included in the IP address of the user computing device, included in scripts at the application-level, etc.

[00158] The computing device may determine, at 1606, whether there is a unique identifier that is associated with the user (*e.g.*, the user computing device, the browser, and/or the browser session) stored on the computing device. The computing device may determine that there is no unique identifier associated with the user computing device when there is no location data stored for the user computing device. For example, the computing device may access a database or other storage location that maintains a mapping of unique identifier to a browser session, a user computing device, and/or location data. Additionally or alternatively, the computing device may determine whether there is a unique identifier for associated with the user based on presence of a tracker (*e.g.*, cookie) installed in the browser application on the user computing device. The tracker may include the unique identifier associated with the user. The tracker may have been installed in the user's browser application (*e.g.*, by the computing device) during a previous visit to the URL via the user's browser application, for example, if the user opted-in to location tracking, as described herein. When the computing device determines, at 1606, that a unique ID is assigned to the browser, the method 1600 may proceed to 1622.

[00159] When the computing device determines that there is no unique identifier assigned to the user, the computing device may be configured to assign (*e.g.*, generate), at 1608, a unique identifier for the user. The unique identifier may be generated randomly. The unique identifier may be universally unique. That is, the unique identifier may be unique for all browsers, all

device types, all locations, etc. Alternatively, the unique identifier may be parsed from the data received in the browser session. Stated differently, the computing device may determine the unique identifier for the user based on the data received, at 1604, via the browser session.

[00160] The computing device may determine, at 1610, whether the user opted-in to or out of location tracking. For example, the user may be asked to opt-in to location tracking when accessing the URL. The user may respond to a prompt by opting in or opting out to location tracking. The computing device may determine, at 1610, whether the user opted-in to or out of location tracking based on whether a location tracker is installed on the user computing device.

[00161] When the user opts-in to location tracking, the computing device may install, at 1610 a tracker (*e.g.*, a cookie) in the browser application on the user computing device. The cookie may be configured to enable the computing device to retrieve geo-location data from the user computing device. The cookie may enable the computing device to recognize return visits by the user computing device. The cookie (*e.g.*, a tracking cookie, browser cookie, HTTP cookie, etc.) may include a small string or segment of text that may be transmitted to the user computing device and stored at the user computing device by a browser application. For example, the cookie may include one or more name-value pairs containing bits of information such as, user preferences, an identifier (*e.g.*, the unique ID assigned at 1608) for a server-based user session, and/or other data used by the computing device (*e.g.*, a server and/or website). The cookie may be used for authenticating, session tracking (*e.g.*, state maintenance), and/or for tracking specific information about a user, such as site preferences, and/or to maintain data related to the user and/or user computing device during navigation. The cookie may be sent in an HTTP header by the computing device to the browser application at the user computing device. The cookie may be sent back to the computing unchanged by the browser application, for example, each time the browser application accesses the URL, introducing state into what may be otherwise stateless HTTP transactions. The computing device may set the cookie at the user computing device in response to a request for a target website (*e.g.*, the URL), the computing device may generate and transmit an HTTP response that includes an HTTP header that includes the parameters for the cookie (*e.g.*, in the form of text) and/or code (*e.g.*, Set-Cookie) requesting the browser application to set the cookie based on the parameters in the HTTP header.

[00162] When the user opts-out of location tracking, the computing device may store, at 1614, a unique ID (*e.g.*, the unique ID assigned at 1608) in a local cache of the user computing device (*e.g.*, of the browser). The unique ID may be stored in the local browser cache, for example, even if the user computing device does not allow cookies (*e.g.*, full cookies). Storing the unique ID in the local browser cache may enable the computing device to recognize return visits by the user computing device via the browser application. The unique ID may be used for authenticating, session tracking (*e.g.*, state maintenance), and/or for tracking specific information about a user, such as site preferences, and/or to maintain data related to the user and/or user computing device during navigation. The unique ID may be sent in an HTTP header by the computing device to the browser application at the user computing device. The computing device may store the unique ID in the local browser cache at the user computing device in response to a request for a target website (*e.g.*, the URL). The user computing device may store the unique ID as key/value (*e.g.*, string to string) in the local browser cache. The unique ID may enable persistence across browser sessions. For example, the unique ID may be recognizable in subsequent browser sessions. The unique ID may remain in the local browser cache, for example, until the local browser cache is explicitly cleared. Storing the unique ID in the local browser cache may not be persistent across browser applications. For example, the unique ID stored in the local browser cache of a one browser application may not be accessible from another browser application.

[00163] The computing device may determine, at 1616, a latitude coordinate and a longitude coordinate of the user computing device. For example, the data received from the browser session may include the latitude and longitude coordinates of the user computing device, as described herein. The computing device may use the latitude and longitude coordinates to track a user. Use of the latitude and longitude coordinates for tracking may improve device and/or network security, for example, by eliminating the need for cookies to track the user.

[00164] The computing device may determine, at 1618, a physical address (*e.g.*, a postal address) for the browser session using the location data. The physical address may indicate a postal address at which the user accessed the URL in the browser session. For example, the computing device may generate, at 1618, the physical address using a map API (*e.g.*, such as Bing Maps API, Mapbox API, OpenStreetMap API, Leaflet API, OpenLayers API, Google

Maps API, and/or another map API). For example, the computing device may translate, at 1618, the received latitude and longitude coordinates into the physical address using the map API.

[00165] The computing device may determine an address type (*e.g.*, residential, apartment/condo building, single family home, commercial, and/or the like) based on the physical address. For example, the computing device may determine the address type using a postal service API. The computing device may use the address type to determine a type and/or frequency of notifications sent to the user. The computing device may determine other user information based on the physical address such as a name associated with the user, an age of the user, a gender of the user, demographics associated with the user, and/or psychographics associated with the user. The demographics associated with the user may include race, marital status, household size, occupation, income, education, and/or living status. The psychographics associated with the user may include personality traits, lifestyles, interests, opinions, beliefs, values, etc. The computing device may determine the type and/or the frequency of notifications sent to the user based on the other information. The computing device may determine the content of the notifications based on the other information.

[00166] At 1620, the computing device may associate the generated unique identifier with the determined location data. For example, the computing device may map, at 1620, the unique identifier to the location data (*e.g.*, physical address). The mapping between the unique identifier and the location data may enable identification of future visits to the URL by the user. The mapping between the unique identifier and the location data may enable an administrative user to identify who is accessing specific URLs, for example, with or without the use of cookies. For example, the unique identifier and location data may enable convergence of an online and offline footprint for a user. When the unique ID is associated, at 1620, to the identified address, the method 1600 may proceed to 1622.

[00167] The computing device may generate, at 1622, a profile for the user, for example, based on the association between the unique identifier and the location data. The user profile may be used to track a plurality of factors (*e.g.*, user profile information) associated with the user and the user's activity. For example, the user profile may include user profile information such as URLs the user accesses, the frequency with which the user accesses the URL(s), demographics associated with the user, the address(es) associated with the user, etc. For

example, the computing device may associate multiple unique identifiers having the same location data with the same user profile. The user profile may be used to generate a targeted marketing campaign.

[00168] The computing device may update, at 1624, the user profile upon subsequent browsing sessions. For example, the computing device may be configured to determine that the user accessed a URL during a first browser session. The computing device may be configured to recognize a second visit to the URL during a second browser session, for example, using the unique identifier stored in the local browser cache. For example, the computing device may update, at 1624, the user profile information based on anonymous data associated with one or more subsequent browser sessions initialized on the user computing device or another user computing device associated with the identified address.

[00169] At 1626, the computing device may generate a confidence rating for the user. The confidence rating may be a measure (*e.g.*, probability) of the user's interest in a product (*e.g.*, such as purchase readiness). The computing device may generate the confidence rating using an algorithm. The algorithm may incorporate learning such that the algorithm improves (*e.g.*, automatically) as more data is applied to the algorithm. The algorithm may determine the confidence rating using one or more general attributes and/or one or more automobile-specific attributes. The one or more general attributes may include distance, devices across family/household, unique pages accessed, a recency multiplier, one or more confidential calculations, the physical address type, demographics associated with the user, psychographics associated with the user, the age of the user, the gender of the user, and/or a frequency of URL visits by the user. The one or more automobile-specific attributes may include finance upgrade segment status, lease upgrade segment status, lease term remaining, lease mileage projection, finance term remaining, equity status, mileage of current vehicle, private shopping mode, opened email, and/or automobile wallet utilization. The confidence rating may be associated with one or more discrete decision values (*e.g.*, researching, interested, ready to buy, and/or purchased). Each of the discrete decision values may be associated with respective thresholds of the confidence rating such that each user's confidence rating is associated with one of the discrete decision values for a present confidence rating. The present confidence rating may be displayed on an administrative graphical user interface (GUI) operating on an administrative user device.

The GUI may display information for a plurality of users. For each of the plurality of users, the GUI may display the name of the user, a product the user is interested in, the confidence rating, and/or other information associated with the user. The GUI may include a visual indication (*e.g.*, an indicator) of the confidence rating for each of the plurality of users. The GUI may indicate the decision value associated with the present confidence rating.

[00170] At 1628, the computing device may generate one or more notifications based on the confidence rating for the user. For example, the computing device may generate the one or more notifications based on a specific product of interest (*e.g.*, the product the user is most interested in). The one or more notifications may include advertisements associated with the product the user is interested in, coupons for the product the user is interested in, queries for questions about the product the user is interested in, and/or the like. The computing device may determine the content of the notifications based on the other information.

[00171] At 1630, the computing device may determine to send the one or more notifications to the user. The computing device may determine the type and/or the frequency of notifications sent to the user based on the other information (*e.g.*, a name associated with the user, an age of the user, a gender of the user, demographics associated with the user, and/or psychographics associated with the user). For example, the computing device may use the confidence rating and/or other information associated with a plurality of users as filtering criteria for a targeted marketing campaign. The filtering criteria may be overlaid on top of the confidence rating, for example, to identify which users to target in the marketing campaign. The method 1600 may end, at 1632.

[00172] Although features and elements are described herein in particular combinations, each feature or element can be used alone or in any combination with the other features and elements. The methods described herein may be implemented in a computer program, software, or firmware incorporated in a computer-readable medium for execution by a computer or processor. Examples of computer-readable media include electronic signals (transmitted over wired or wireless connections) and computer-readable storage media. Examples of computer-readable storage media include, but are not limited to, a read only memory (ROM), a random access memory (RAM), removable disks, and optical media such as CD-ROM disks, and digital versatile disks (DVDs).

CLAIMS

What is claimed is:

1. A method comprising:

receiving first anonymous data associated with a first browser session initialized by a user via a browser on a user computing device, wherein the first anonymous data comprises one or more of a time, a date, one or more uniform resource locators (URLs), a referring URL, a browser type, a language, an internet protocol (IP) address, or location data;

determining that the user has not been assigned a unique identifier based on a lack of stored location data for the user computing device;

assigning the unique identifier to the user;

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;

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;

determining a latitude coordinate and a longitude coordinate of the user computing device, during the first browser session, wherein the latitude coordinate and 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);

associating the unique identifier to the physical address;

generating a user profile for the user using the unique identifier and physical address, the user profile comprising profile information that comprises one or more URLs the user has accessed, the frequency with which the user accessed the URL(s), demographics associated with the user, the address(es) associated with the user, or the devices associated with the user;

updating the profile information based on second anonymous data associated with a second browser session initialized on the user computing device or another user computing device associated with the physical address;

determining, using the updated profile information, a confidence rating for the user, the confidence rating indicating a quantifiable measure of the user's interest in a product;

generating one or more notifications based on one or more of the updated profile information or the confidence rating; and

determining when to send the one or more notifications to the user.

2. The method of claim 1, further comprising:

determining that the user accessed a URL during the first browser session; and

recognizing a second visit to the URL during the second browser session using the unique identifier stored in the local browser cache.

3. The method of claim 1, further comprising, installing, upon determining that the user opted-in to location tracking, the location tracker in the browser.

4. The method of claim 1, further comprising determining personal information associated with the user, the personal information comprising one or more of an address type, a name of the user, an age of the user, a gender of the user, demographics associated with the user, or psychographics associated with the user, wherein the personal information is used to generate the user profile and determine the confidence rating.

5. The method of claim 4, wherein the address type comprises one or more of a residential address, a single family home, an apartment building, or a commercial address, wherein when the address type is a residential address, the user profile is associated with the residential address such that information associated with the residential address is used to generate the user profile.

6. The method of claim 1, wherein the one or more notifications comprise one or more of an email, a text message, a mobile phone notification, a phone call, or a digital display.

7. The method of claim 1, further comprising:

determining a specific product of interest based on the URLs that the user visited; and

generating the one or more notifications based on the specific product of interest.

8. The method of claim 1, further comprising updating the determined confidence rating upon subsequent visits to the specific URL to indicate an increase in the user's interest in the product.

9. The method of claim 1, wherein the anonymous data comprises the latitude coordinate and the longitude coordinate.

10. The method of claim 1, wherein the location tracker is stored in a folder associated with the browser.

11. A non-transitory, machine-readable storage device that includes instructions that, when executed by a computing device, cause the computing device to:

receive first anonymous data associated with a first browser session initialized by a user via a browser on a user computing device, wherein the first anonymous data comprises one or more of a time, a date, one or more uniform resource locators (URLs), a referring URL, a browser type, a language, an internet protocol (IP) address, or location data;

determine that the user has not been assigned a unique identifier based on a lack of stored location data for the user computing device;

assign the unique identifier to the user;

determine whether the user opted-in to or out of location tracking, based on whether a location tracker is installed on the user computing device;

send, 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;

determine a latitude coordinate and a longitude coordinate of the user computing device, during the first browser session, wherein the latitude coordinate and 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;

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);

associate the unique identifier to the physical address;

generate a user profile for the user using the unique identifier and physical address, the user profile comprising profile information that comprises one or more URLs the user has accessed, the frequency with which the user accessed the URL(s), demographics associated with the user, the address(es) associated with the user, or the devices associated with the user;

update the profile information based on second anonymous data associated with a second browser session initialized on the user computing device or another user computing device associated with the physical address;

determine, using the updated profile information, a confidence rating for the user, the confidence rating indicating a quantifiable measure of the user's interest in a product;

generate one or more notifications based on one or more of the updated profile information or the confidence rating; and

determine when to send the one or more notifications to the user.

12. The non-transitory, machine-readable storage device of claim 11, wherein the instructions, when executed by the computing device, cause the computing device to:

determine that the user accessed a URL during the first browser session; and

recognize a second visit to the URL during the second browser session using the unique identifier stored in the local browser cache.

13. The non-transitory, machine-readable storage device of claim 11, wherein the instructions, when executed by the computing device, cause the computing device to install, upon determining that the user opted-in to location tracking, the location tracker in the browser.

14. The non-transitory, machine-readable storage device of claim 11, wherein the instructions, when executed by the computing device, cause the computing device to determine personal information associated with the user, the personal information comprising one or more of an address type, a name of the user, an age of the user, a gender of the user, demographics

associated with the user, or psychographics associated with the user, wherein the personal information is used to generate the user profile and determine the confidence rating.

15. The non-transitory, machine-readable storage device of claim 14, wherein the address type comprises one or more of a residential address, a single family home, an apartment building, or a commercial address, wherein when the address type is a residential address, the user profile is associated with the residential address such that information associated with the residential address is used to generate the user profile.

16. The non-transitory, machine-readable storage device of claim 11, wherein the one or more notifications comprise one or more of an email, a text message, a mobile phone notification, a phone call, or a digital display.

17. The non-transitory, machine-readable storage device of claim 11, wherein the instructions, when executed by the computing device, cause the computing device to:
determine a specific product of interest based on the URLs that the user visited; and
generate the one or more notifications based on the specific product of interest.

18. The non-transitory, machine-readable storage device of claim 11, wherein the instructions, when executed by the computing device, cause the computing device to update the determined confidence rating upon subsequent visits to the specific URL to indicate an increase in the user's interest in the product.

19. The non-transitory, machine-readable storage device of claim 11, wherein the anonymous data comprises the latitude coordinate and the longitude coordinate.

20. The non-transitory, machine-readable storage device of claim 11, wherein the location tracker is stored in a folder associated with the browser.

ABSTRACT

Systems, methods, and apparatus are described herein for determining a location from anonymous data. For example, a computing device may receive anonymous data associated with a browser session initialized by a user via a browser on a user computing device. The computing device may determine that the user has not been assigned a unique identifier. The computing device may determine whether the user opted-in to location tracking. If the user opted-out of location tracking, the computing device may determine a latitude coordinate and a longitude coordinate of the user computing device during the browser session. The computing device may identify a physical address for the user based on the latitude coordinate and the longitude coordinate, for example, using a map application programming interface (API). The computing device may assign the unique identifier to the user. The computing device may associate the unique identifier to the physical address.

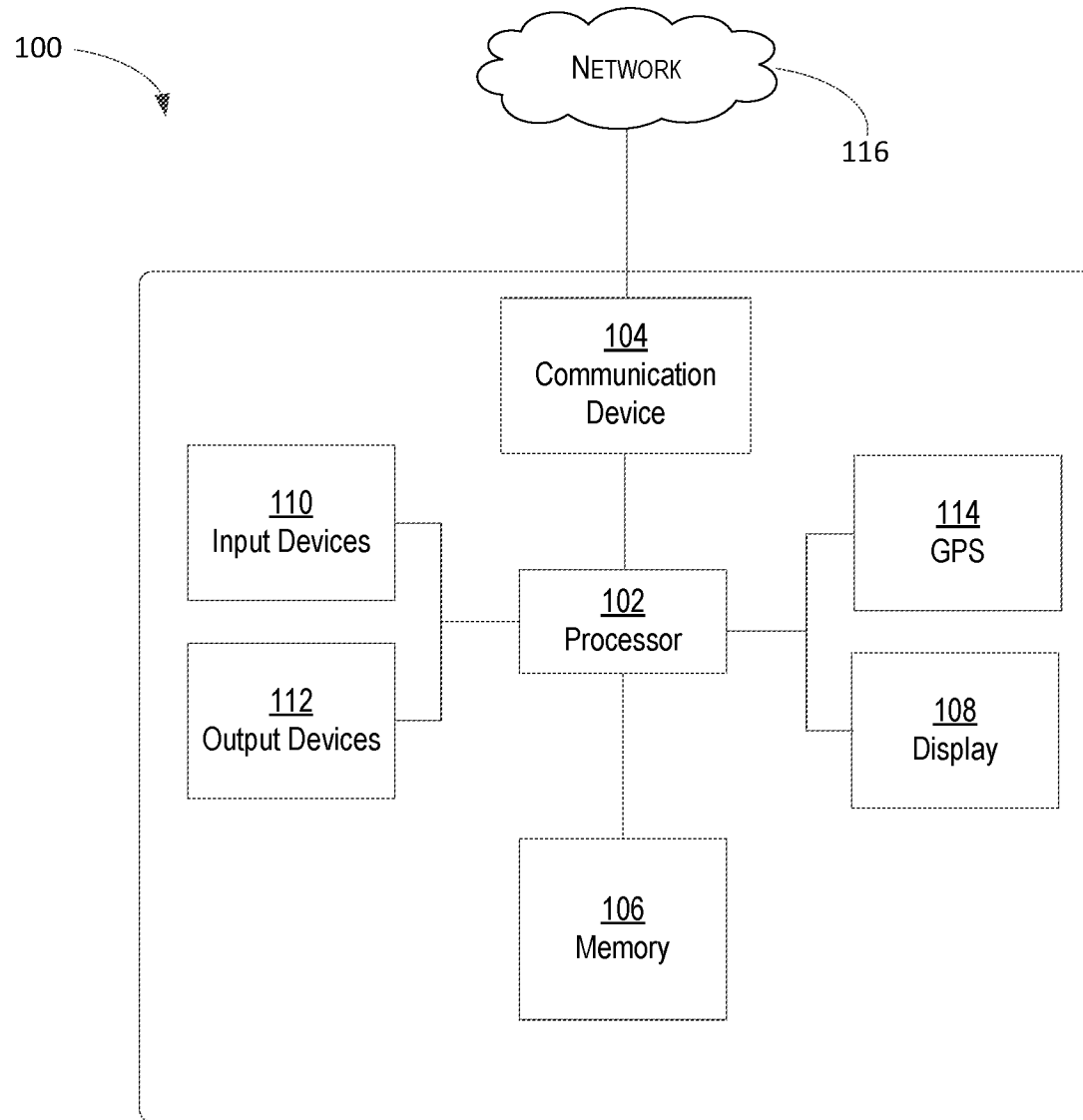
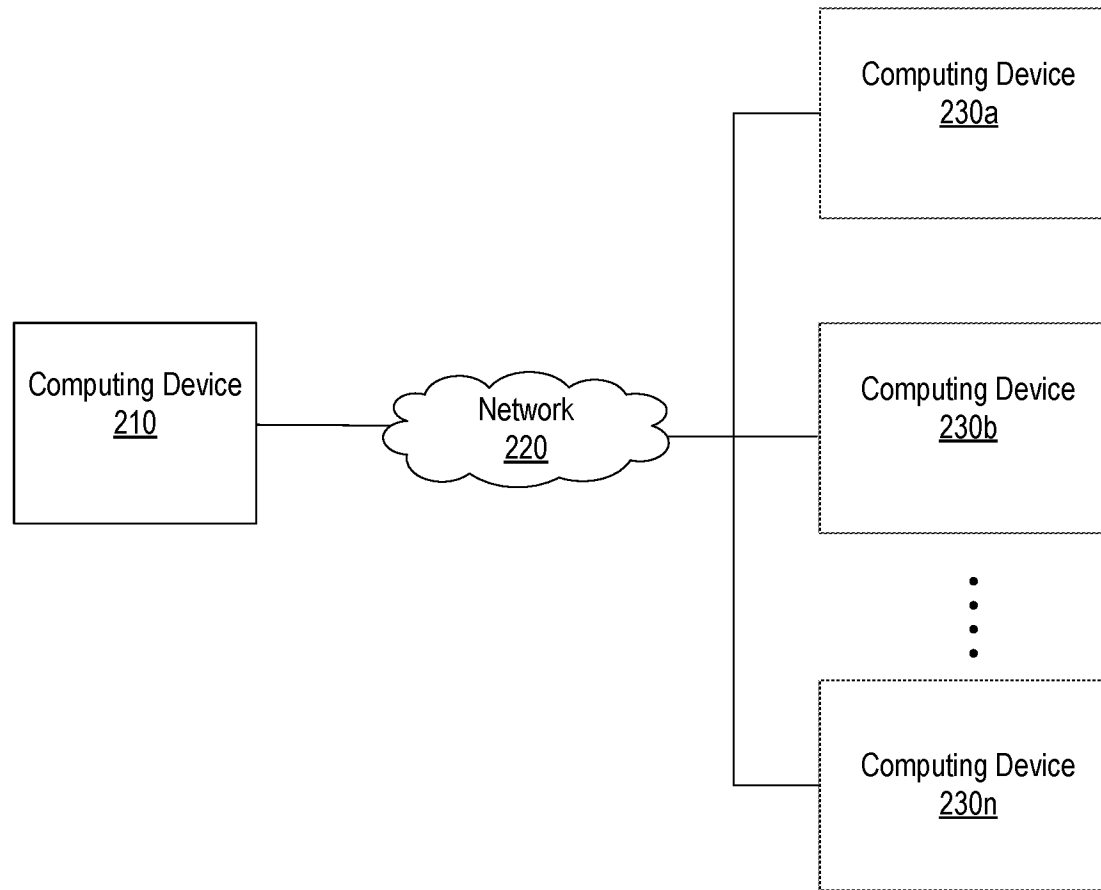


FIG. 1

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FIG. 2

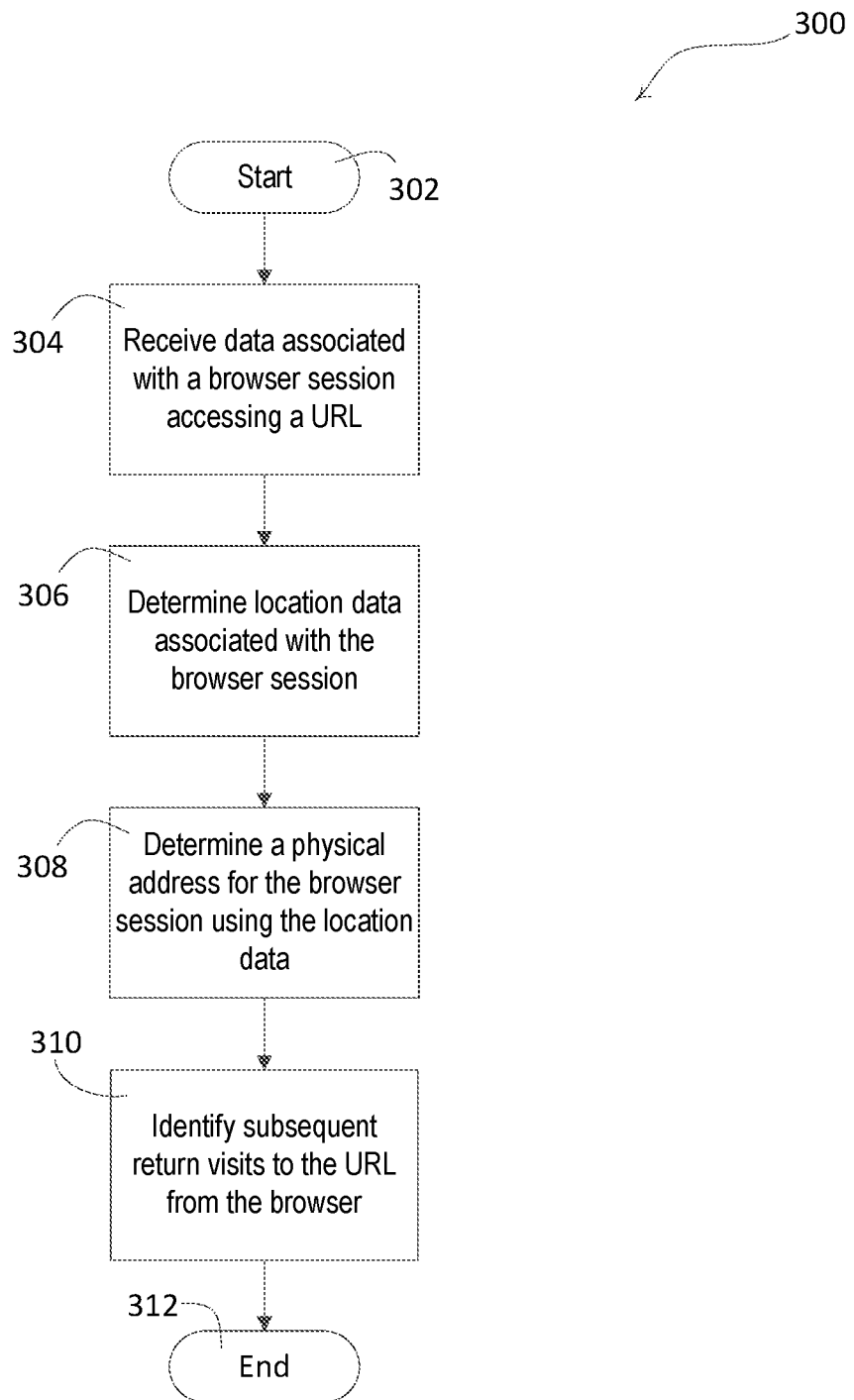


FIG. 3

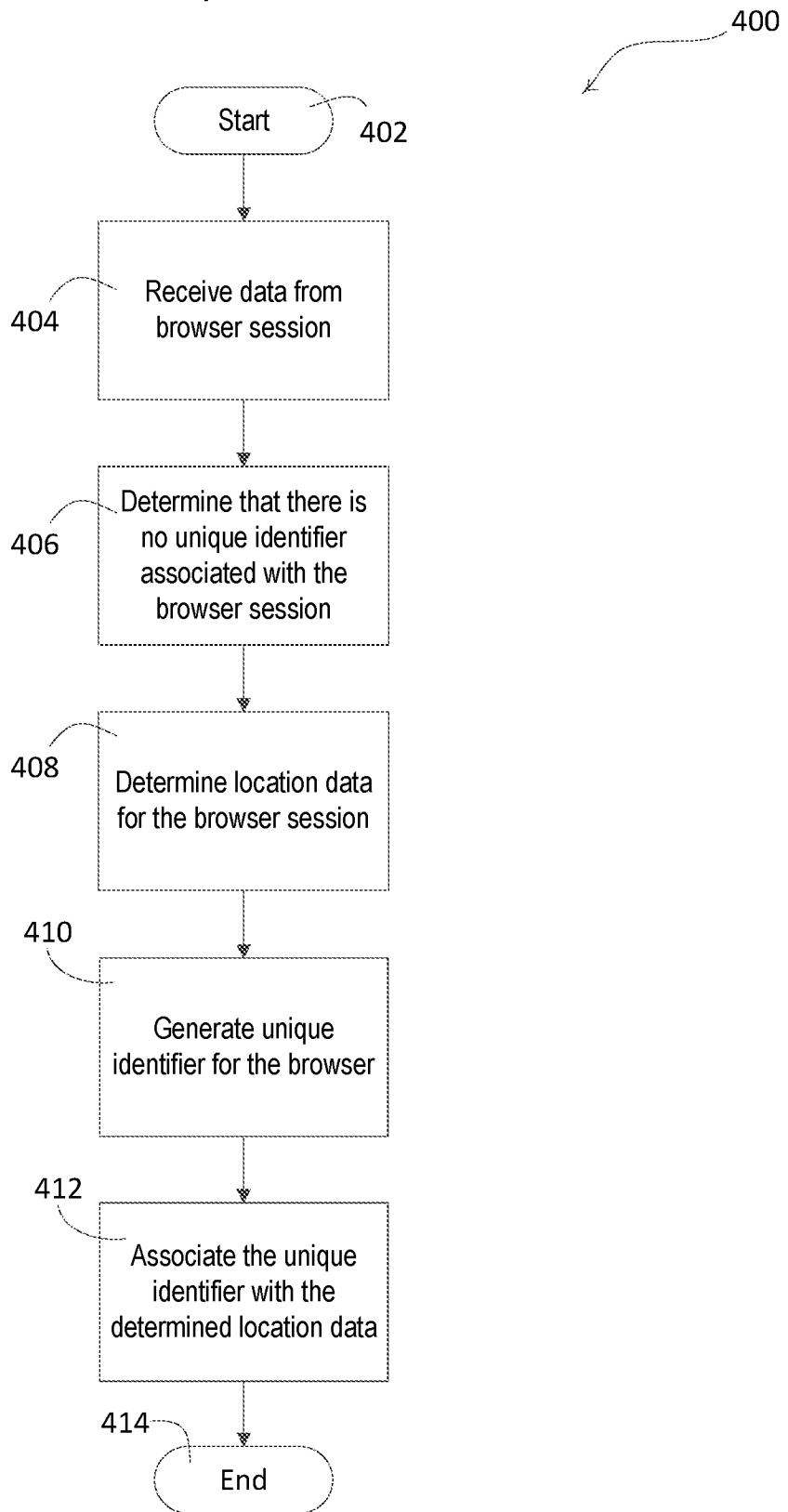


FIG. 4

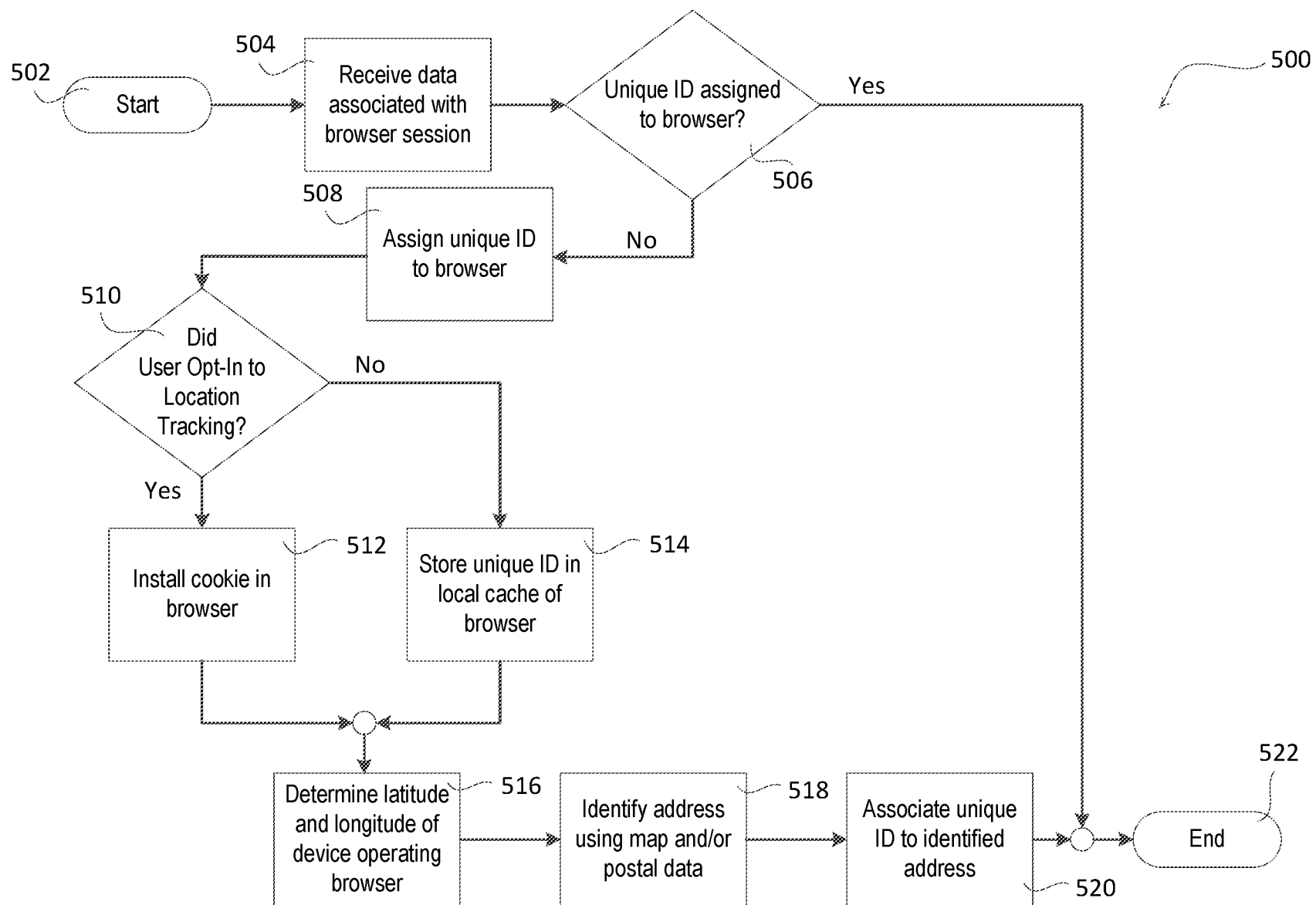


FIG. 5

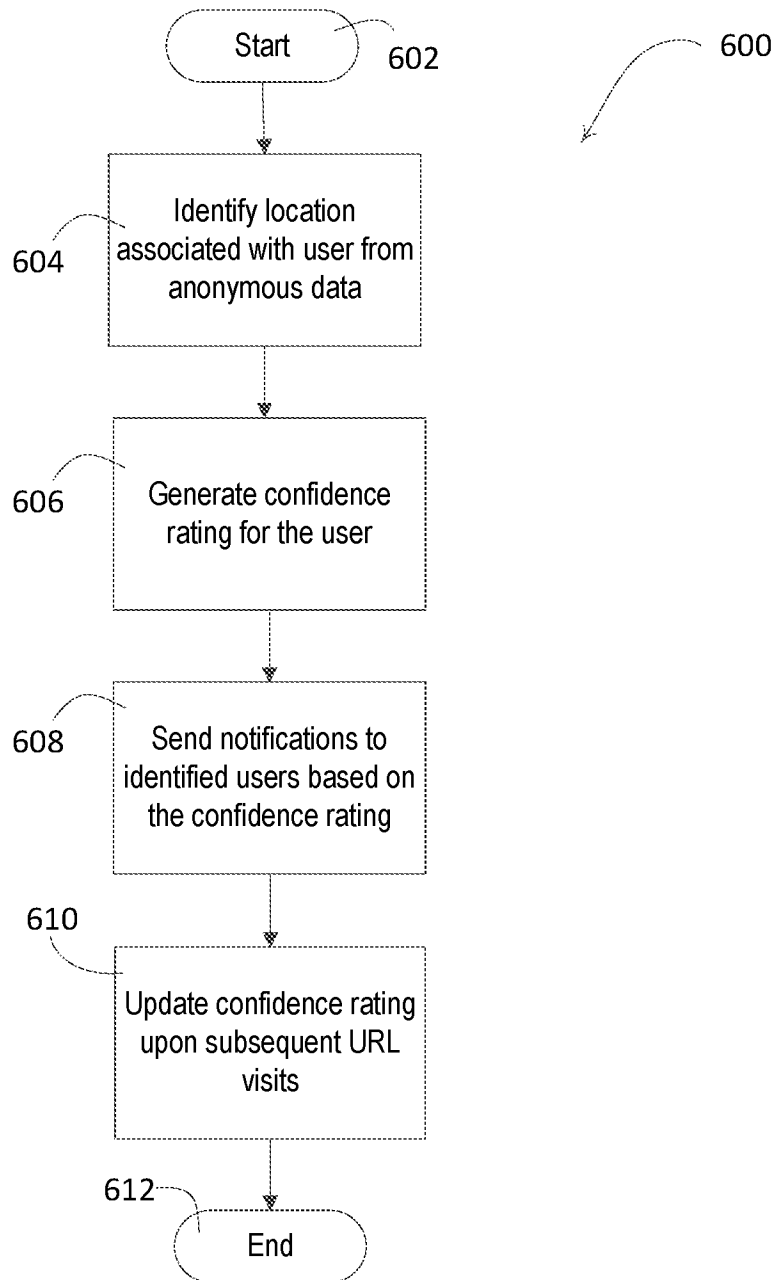


FIG. 6

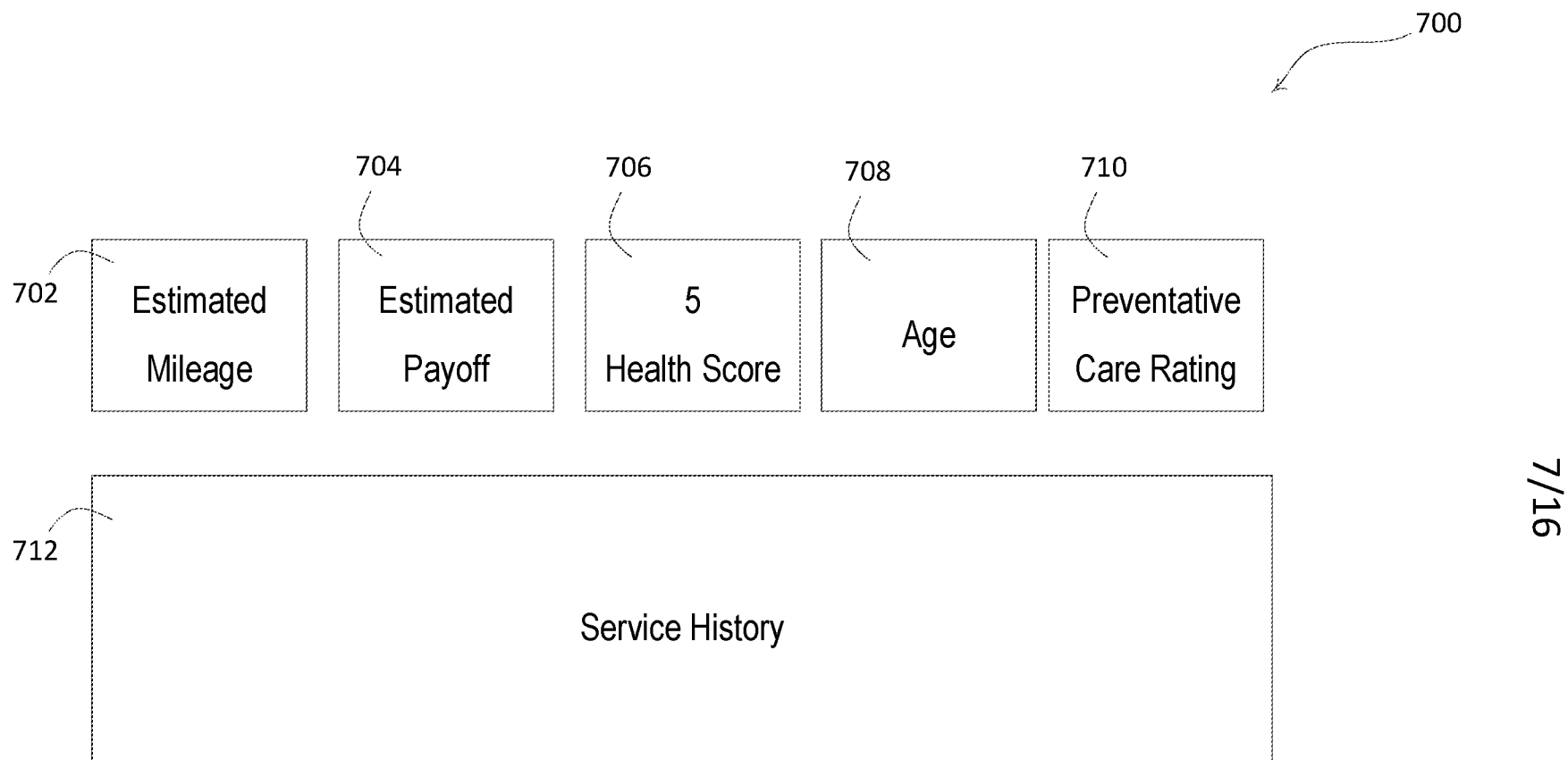


FIG. 7

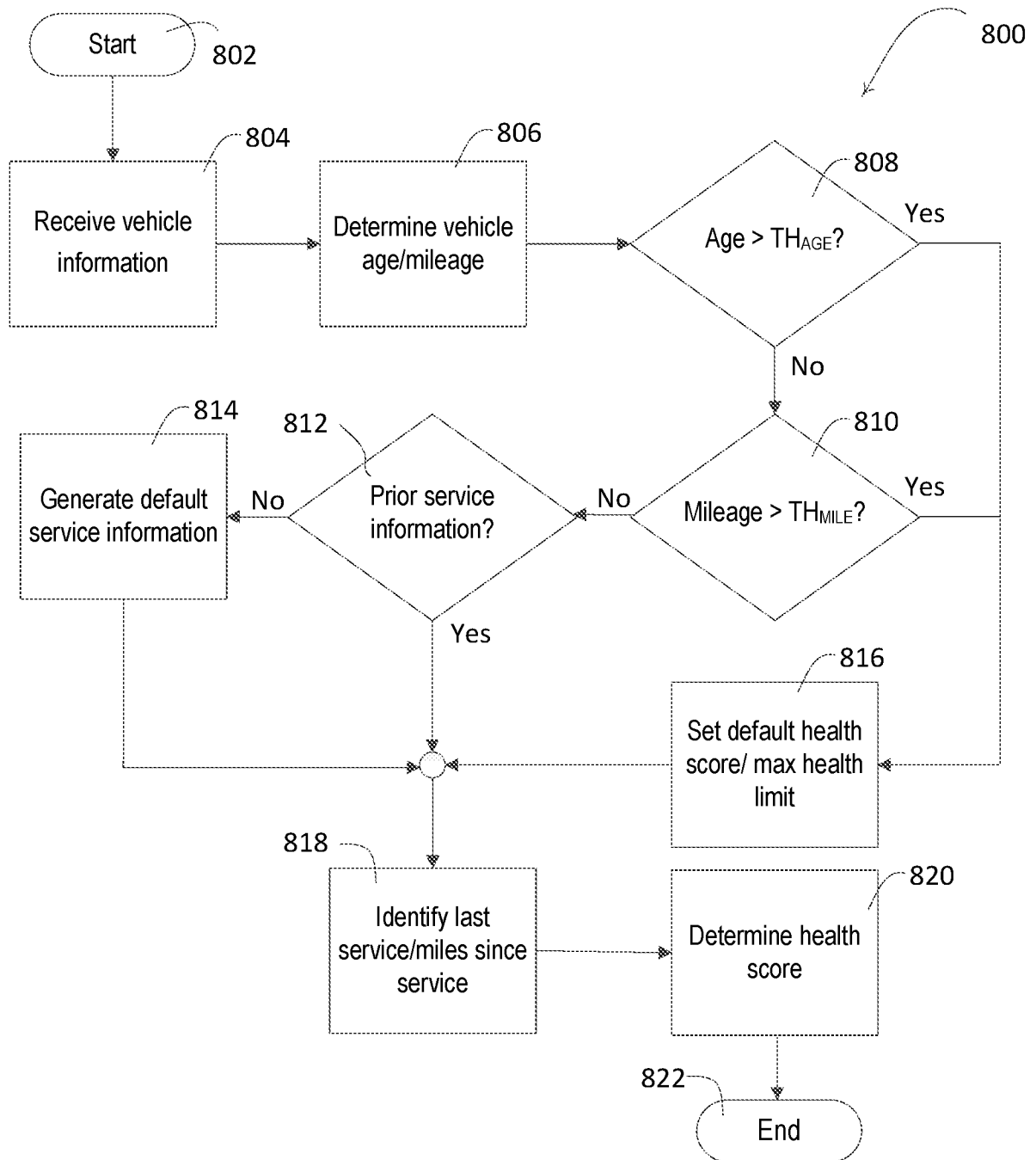


FIG. 8

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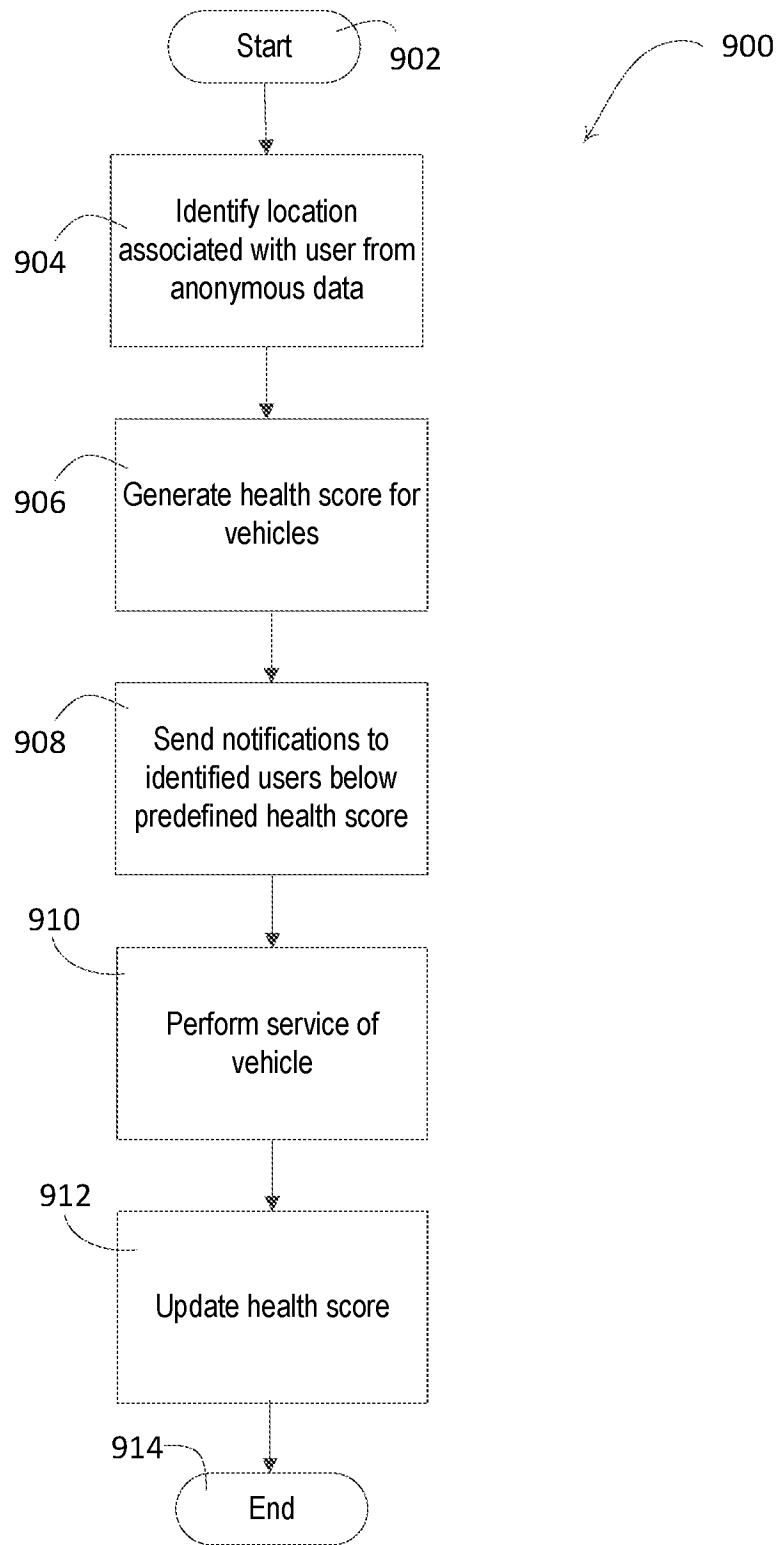


FIG. 9

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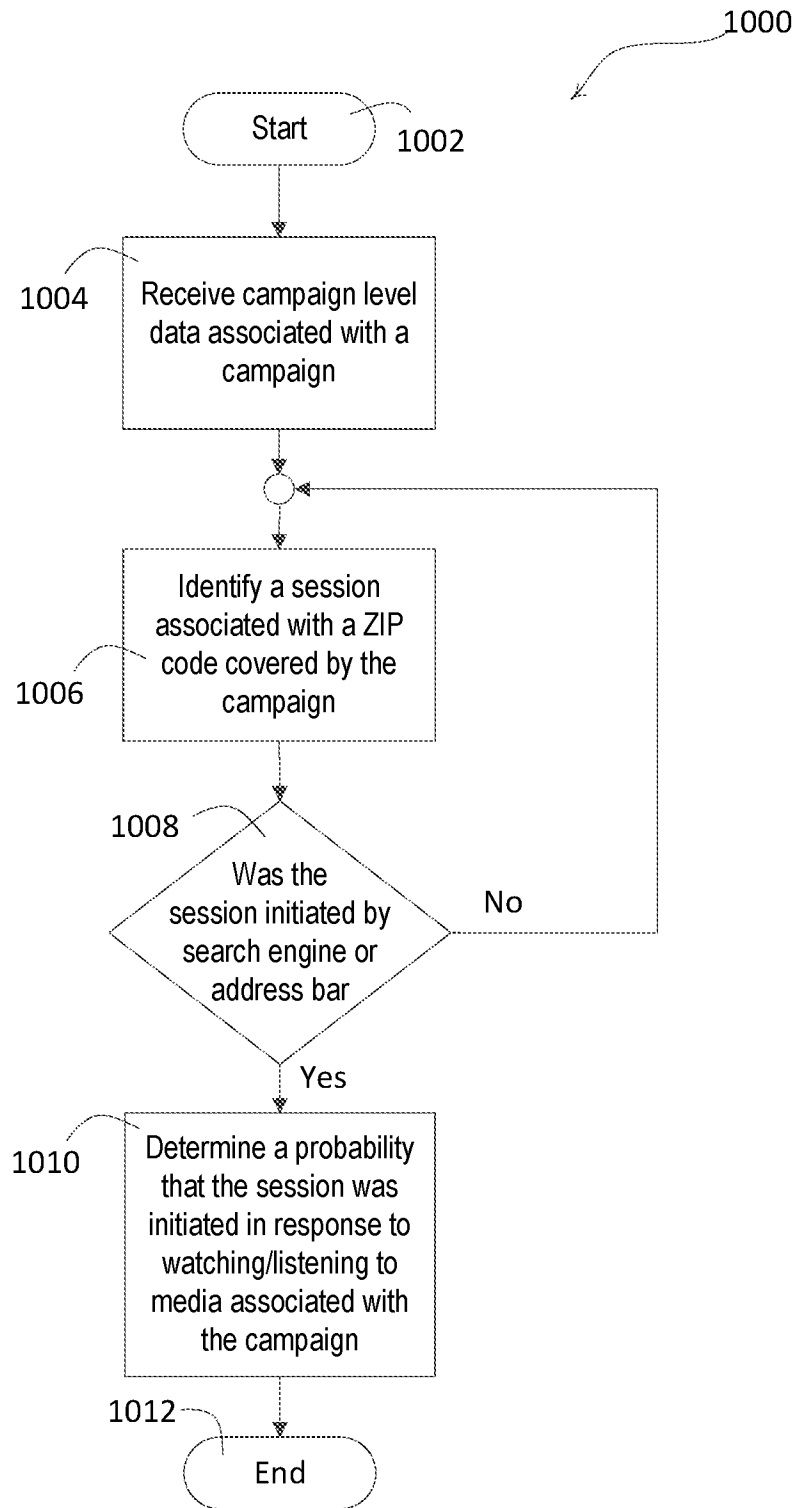


FIG. 10

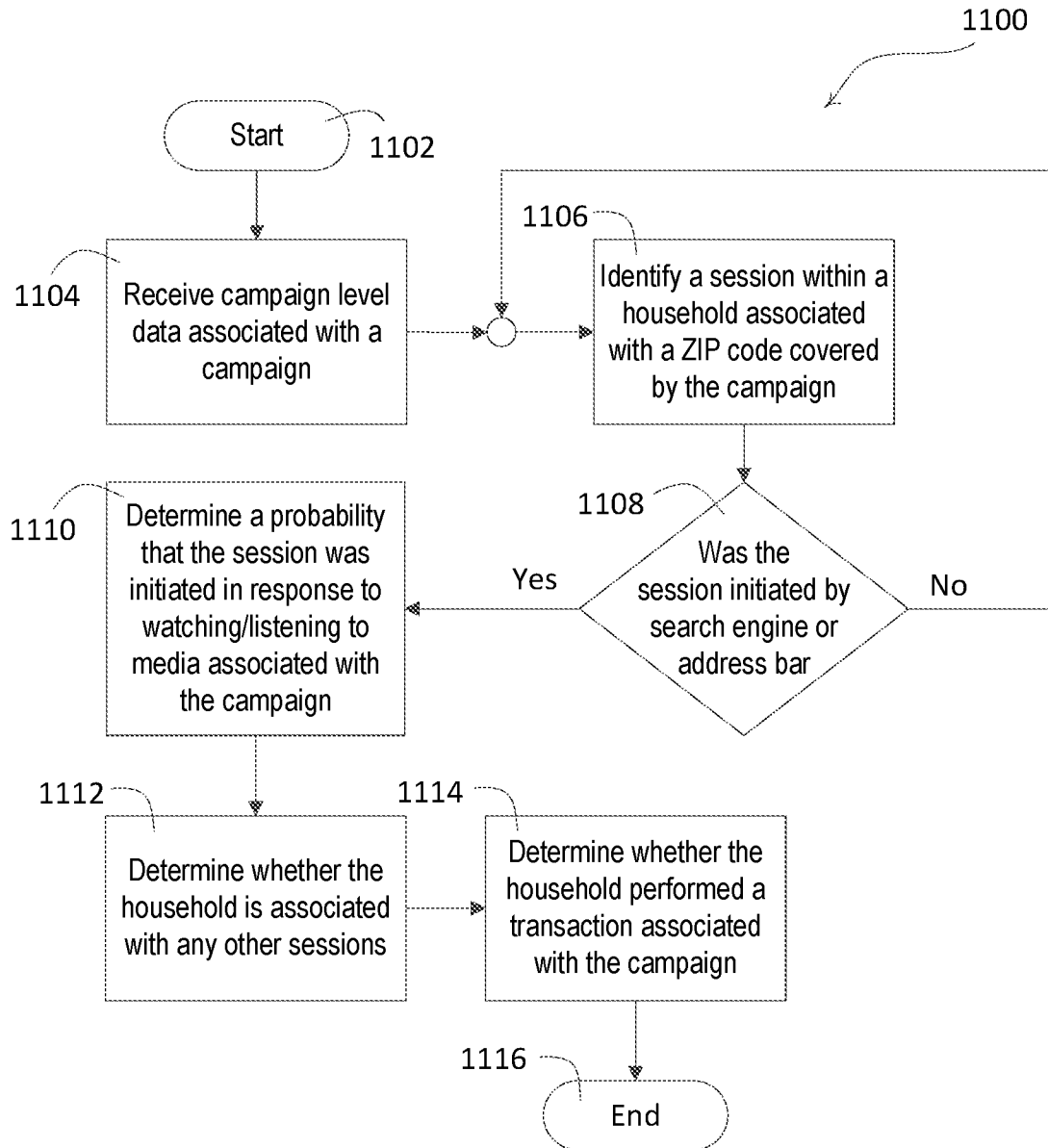


FIG. 11

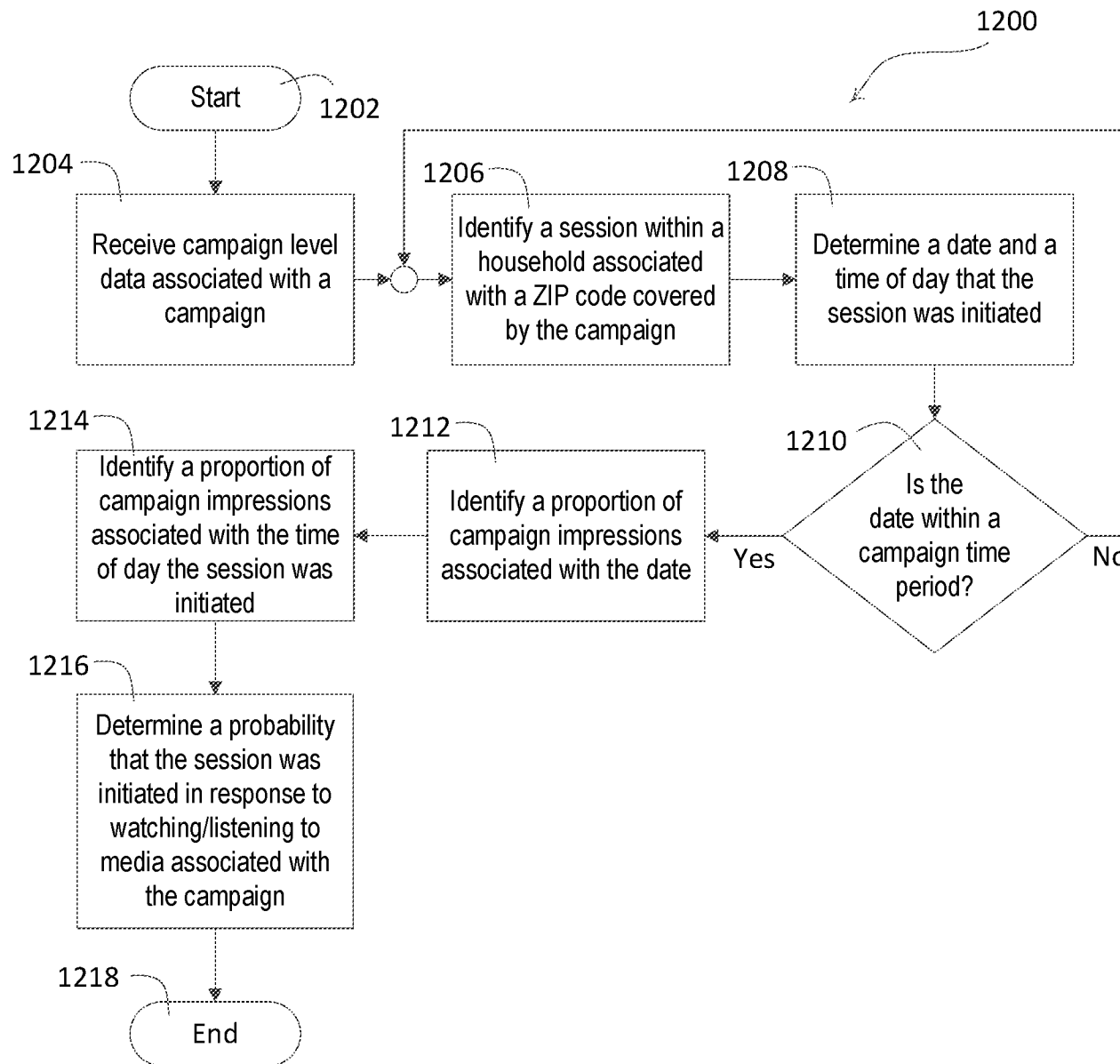


FIG. 12

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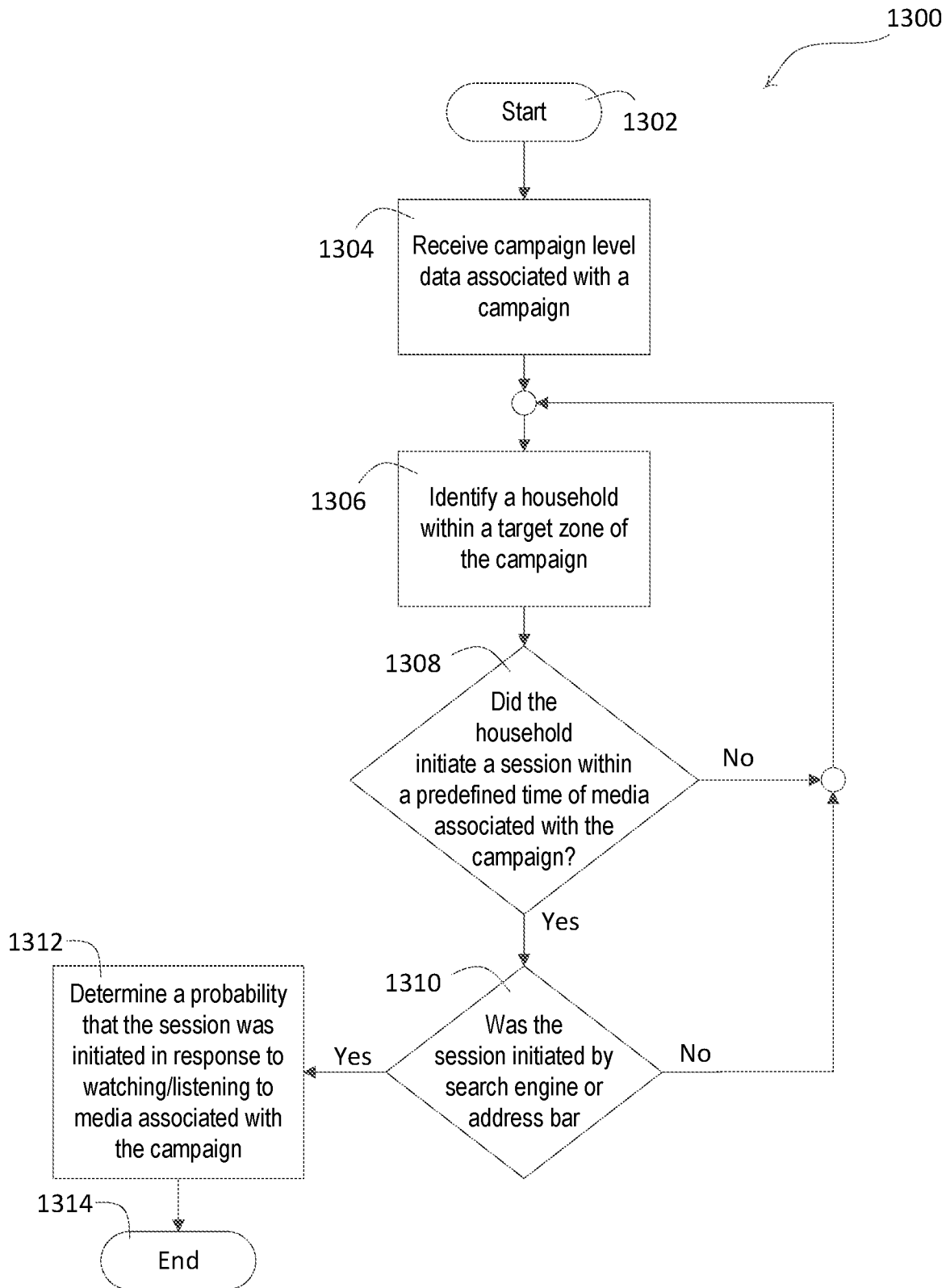


FIG. 13

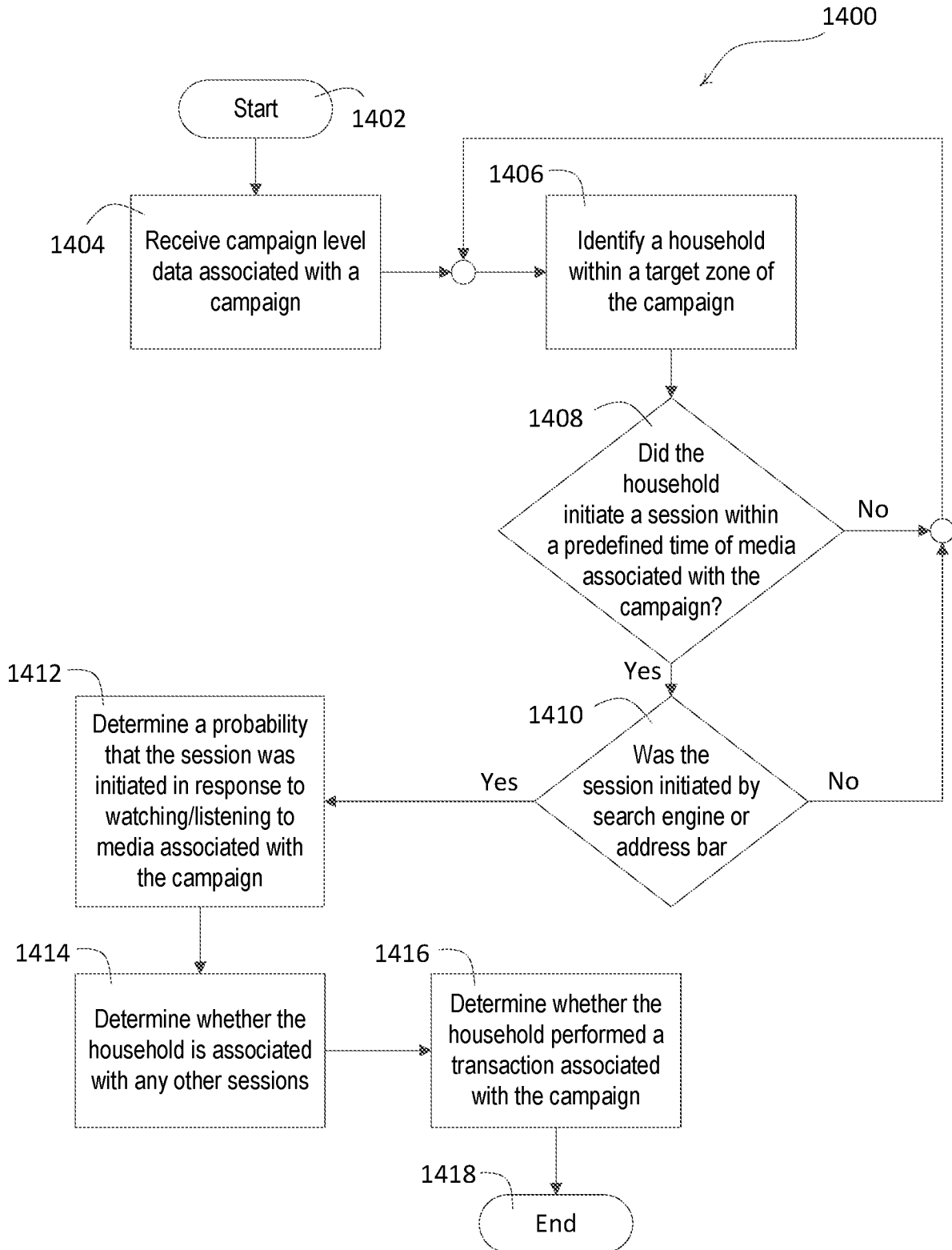


FIG. 14

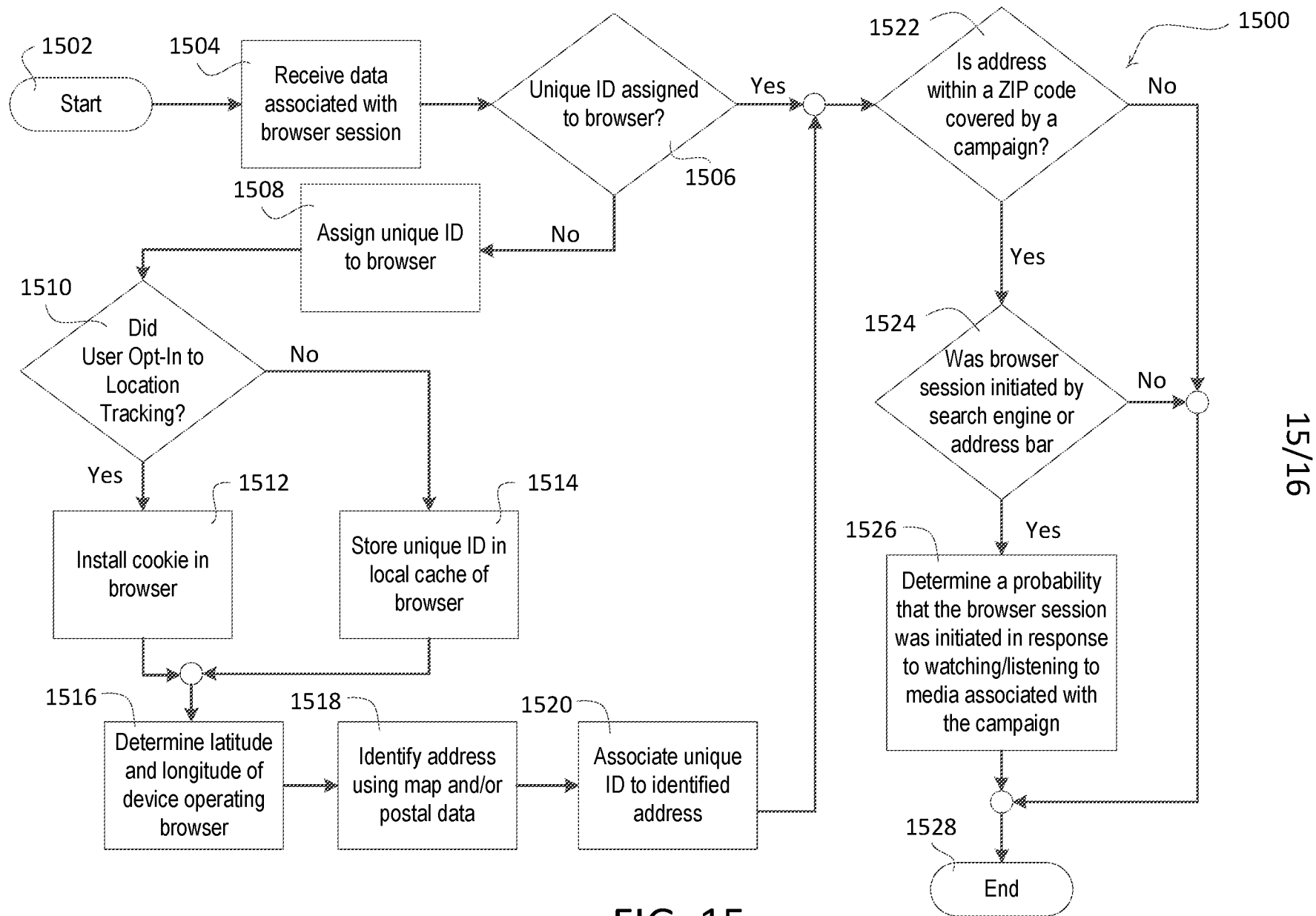


FIG. 15

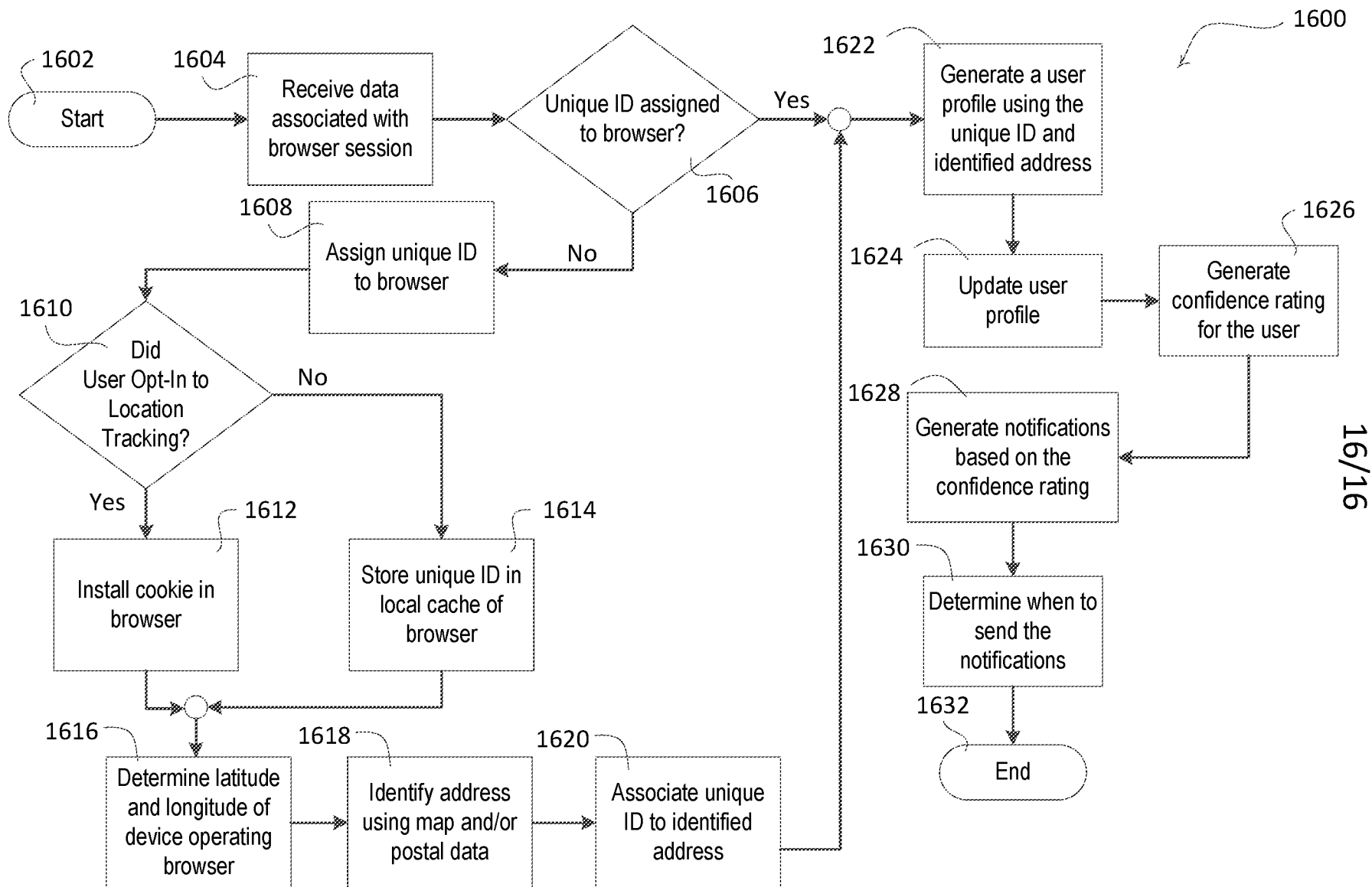


FIG. 16

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(Note: The boxes above may be left blank if information is provided on form PTO/AIA/82A.)

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54380

OR

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FullThrottle Technologies, LLC

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- ☐ Legal Representative of a Deceased or Legally Incapacitated Inventor (title not required below)
- ☒ Assignee or Person to Whom the Inventor is Under an Obligation to Assign (provide signer's title if applicant is a juristic entity)
- ☐ Person Who Otherwise Shows Sufficient Proprietary Interest (e.g., a petition under 37 CFR 1.46(b)(2) was granted in the application or is concurrently being filed with this document) (provide signer's title if applicant is a juristic entity)

SIGNATURE of Applicant for Patent

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Signature

Designed by

Jessie Bryan

Date (Optional)

6/8/2021

Name

Jessie Bryan

Title

General Counsel

NOTE: Signature - This form must be signed by the applicant in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. If more than one applicant, use multiple forms.

☒ Total of (1) forms are submitted.

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