# UNITED STATES DISTRICT COURT EASTERN DISTRICT OF VIRGINIA DIVISION

| BRIDGE AND POST, INC.  | )                     |
|--|-----------------------|
| Plaintiff,   | ) CIVIL ACTION NO     |
| vs.  | ) JURY TRIAL DEMANDED |
| VERIZON COMMUNICATIONS, INC.,<br>CELLCO PARTNERSHIP d/b/a VERIZON<br>WIRELESS, AOL, INC., and OATH, INC. | )<br>)<br>)<br>)      |
| Defendants.  | )                     |
|  | )                     |

# **COMPLAINT FOR PATENT INFRINGEMENT**

Plaintiff Bridge and Post, Inc. ("BRIDGE AND POST" or "PLAINTIFF") hereby files this Original Complaint against Defendants Verizon Communications, Inc. ("VERIZON COMMUNICATIONS"), Cellco Partnership d/b/a Verizon Wireless ("VERIZON WIRELESS") (VERIZON COMMUNICATIONS and VERIZON WIRELESS being collectively referred to herein as "VERIZON"), AOL, Inc. ("AOL"), and Oath, Inc. ("OATH") (collectively "DEFENDANTS") seeking damages for DEFENDANTS' willful direct and indirect infringement of U.S. Patent No. 9,659,314 ("the '314 Patent" or "the Patent-in-Suit").

PLAINTIFF alleges as follows:

# THE PARTIES

1. Defendant VERIZON COMMUNICATIONS is a Delaware corporation with a principal place of business at 140 West Street, New York, New York 10007.

2. Defendant VERIZON WIRELESS is a Delaware general partnership with

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offices located at One Verizon Way, Basking Ridge, New Jersey 07920. VERIZON WIRELESS is a wholly-owned subsidiary of VERIZON COMMUNICATIONS.

3. Defendant AOL is a Delaware corporation with offices and substantial business, engineering, and management operations related to the products, services and methods accused of infringing the Patent-in-Suit at 22000 AOL Way, Dulles, Virginia 20166. AOL is or was a wholly-owned subsidiary of VERIZON COMMUNICATIONS.

4. Defendant OATH is a corporation with offices and substantial business, engineering, and management operations related to the products, services and methods accused of infringing the Patent-in-Suit at 22000 AOL Way, Dulles, Virginia 20166. OATH is a whollyowned subsidiary of VERIZON COMMUNICATIONS. On information and belief, OATH was formed on June 13, 2017 as the result of VERIZON COMMUNICATIONS' merger of its wholly-owned subsidiaries AOL, Inc. and Yahoo! Inc. Upon completion of the merger, AOL, Inc. and Yahoo! Inc. ceased to exist as separate legal entities and were merged into OATH. On information and belief, OATH is involved through its AOL and Yahoo! divisions with the provision of online advertising services for both publishers and advertisers across mobile, desktop, and television platforms, including services relating to the selection and delivery of targeted online content through at least OATH's ONE by AOL platform (including at least the ONE by AOL: Audience data management platform, ONE by AOL: Display MP supply-side platform and ad exchange, ONE by AOL: Mobile supply-side platform and ad exchange, ONE by AOL: Video supply-side platform and ad exchange, ONE by AOL: Ad Server, ONE by AOL: Display demand-side platform, ONE by AOL: TV demand-side platform, and ONE by AOL: Video demand-side platform), Yahoo! BrightRoll advertising platform (including the BrightRoll DSP and the BrightRoll Exchange), and Yahoo! Gemini search and native advertising platform.

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On information and belief, OATH is also involved through its AOL and Yahoo! divisions with the provision of digital content through a variety of AOL.-branded content providers such as the AOL. web portal, AOL. Search, AOL. Mail, AOL. News, AOL. Video, and AOL. Games, and a variety of Yahoo!-branded online content providers such as the Yahoo! web portal, Yahoo! Search, Yahoo! Mail, Yahoo! News, Yahoo! Finance, Yahoo! Groups, Yahoo! Messenger, and Yahoo! Sports, as well as numerous independently branded online content providers including The Huffington Post, Engadget, TechCrunch, Autoblog, MapQuest, Flickr, and Tumblr.

5. BRIDGE AND POST is an Arkansas corporation with its principal place of business in Little Rock, Arkansas. BRIDGE AND POST is the owner and assignee of the Patent-in-Suit. The parent of the Patent-in-Suit was acquired from the original assignee of that patent, FEEVA TECHNOLOGY, INC. ("FEEVA").

## JURISDICTION AND VENUE

This Court has original subject matter jurisdiction over this action pursuant to
28 U.S.C. §§ 1331 and 1338(a), as this action arises under the United States patent laws,
35 U.S.C. § 271 et seq.

7. This Court has personal jurisdiction over DEFENDANTS because they transact substantial business in the Commonwealth of Virginia, contract to supply services or things in the Commonwealth of Virginia, caused tortious injury by an act or omission in the Commonwealth of Virginia, and in this district specifically.

8. Venue is proper in this judicial district pursuant to 28 U.S.C. § 1400(b). A substantial part of the acts giving rise to this action occurred in this judicial district, DEFENDANTS are subject to personal jurisdiction in this judicial district, and DEFENDANTS have committed acts of infringement in and regularly conducted business in this judicial district.

Additionally, AOL and it successor-in-interest OATH maintain major business operations in this judicial district related to the accused products, services and methods. On information and belief, key VERIZON WIRELESS personnel involved with and responsible for the accused products, services and methods, including its development, are and/or were based in this judicial district, at VERIZON's Ashburn, Virginia offices.

# FACTUAL ALLEGATIONS

9. This case arises from VERIZON's acts of obtaining and copying and then incorporating, making, using and selling the patented and proprietary technology of the innovative start-up FEEVA in VERIZON's Precision Marketing Insights programs, VERIZON RELEVANT MOBILE ADVERTISING and VERIZON SELECTS, which are now part of OATH (previously known as the AOL Advertising Network). VERIZON copied FEEVA's technology despite having executed two non-disclosure agreements that barred unauthorized use of the FEEVA technology. VERIZON also improperly filed for and obtained multiple patents (U.S. Patent Nos. 8,832,436 and 8,763,101, and continuations thereof, including U.S. Patent Application No. 14/735,776) based on the FEEVA patented technology without disclosing to the United States Patent and Trademark Office ("USPTO") that VERIZON was not the true owner or inventor.

10. FEEVA was the original assignee of U.S. Patent Application No. 12/045,693, which ultimately issued as U.S. Patent No. 8,862,747 ("the '747 Patent) and is the parent of the '314 Patent asserted here. FEEVA was a venture capital-backed start-up, founded by several technologists with deep experience in telecommunications and marketing, that focused on developing technological solutions to problems associated with incorporating targeted marketing and market segmentation strategies into online advertising. The named inventors of the Patent-

in-Suit included founders and early employees of FEEVA. In developing their technologies, FEEVA's inventors, developers, and executives discussed mobile phone user and web user privacy with officials at the Federal Trade Commission, privacy advocates at the Electronic Frontier Foundation and the Center for Democracy and Technology, and privacy managers and executives at several major ISPs, including VERIZON.

# THE '314 PATENT

11. The '314 Patent was filed on October 10, 2014 and was issued by the USPTO on May 23, 2017. The '314 Patent is a continuation of the '747 Patent, which claims a method and apparatus for tagging hypertext transport protocol ("HTTP") requests using extensible fields in the HTTP request headers. Like the '747 Patent, the '314 Patent is entitled "Method and Apparatus For Tagging Network Traffic Using Extensible Fields In Message Headers." A copy of the '314 Patent is attached hereto as Exhibit A.

12. The '314 Patent claims methods for selecting media for delivery to a targeted user. In accordance with one claimed method, user information is determined for a user of a client computing device, and a user identifier is generated from the user information. Network traffic bound for a destination site is tagged by a network routing device, including by encrypting the user identifier in an alphanumeric string to generate a request identifier and adding the request identifier to the network traffic to generate tagged network traffic. The tagged network traffic is transmitted to the destination site, and a request to decode the tagged network traffic is received from a requester associated with the destination site. The tagged network traffic is decoded to obtain the user identifier, and stored user information associated with the user identifier is retrieved and transmitted to the requester.

13. In another claimed method for selecting media for delivery to a targeted user,

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user information for a user is determined at a server, and a user identifier is generated at the server from the user information. A decode request to decode tagged network traffic is received at the server from a requester associated with a destination site. Network traffic is intercepted by a network routing device and tagged to create the tagged network traffic, which includes a request identifier comprising the user identifier encrypted in an alphanumeric string. The tagged network traffic is transmitted from the network routing device to the destination site. The tagged network traffic is decoded at the server to obtain the user identifier, and stored information associated with the user identifier is retrieved at the server and transmitted to the requester.

14. In another claimed method for selecting media for delivery to a targeted user, user information for a user is determined by a network routing device, which generates a user identifier from the user information. Network traffic bound for a destination site is tagged with the network routing device, including by encrypting the user identifier in an alphanumeric string to generate a request identifier and adding the request identifier to the network traffic to generate tagged network traffic. The tagged network traffic is transmitted by the network routing device to the destination site, which retrieves stored user information from a server after transmitting a decode request to decode the tagged network traffic.

#### **DISCLOSURE OF THE PATENTED INVENTIONS TO VERIZON**

15. VERIZON learned of FEEVA's inventions between 2007 and 2010. Beginning in 2007, FEEVA interacted with VERIZON under a non-disclosure agreement ("NDA") executed in April 2007, and a second NDA executed April 15, 2010. Pursuant to these two non-disclosure agreements, FEEVA presented its technology to VERIZON in a series of confidential meetings and communications between 2007 and 2010, including 2007 meetings involving senior executives of VERIZON and FEEVA, and an April 2009 technical conference

in San Jose, California attended by numerous VERIZON technical employees. In March 2010 in Basking Ridge, New Jersey, FEEVA explained its technology to VERIZON employees. Multiple VERIZON employees requested additional information from FEEVA's employees concerning FEEVA's technology, including proprietary schematics and data flows showing key features of FEEVA's inventions, which FEEVA then disclosed to VERIZON pursuant to the NDAs. Additionally, in summer 2010, VERIZON WIRELESS made a one-time purchase of FEEVA's technology to advertise VERIZON to users of an airline in-flight wi-fi service. During these interactions, FEEVA made VERIZON aware that FEEVA's technology was covered by pending patent applications and/or an issued patent. For example, in September 2010, FEEVA emailed the individual who held positions as Executive Vice President and Chief Technology Officer at both VERIZON and VERIZON WIRELESS, regarding FEEVA's technology and the value it could bring to VERIZON, and included a link to information regarding FEEVA's first patent, U.S. Patent No. 7,657,594 ("the '594 Patent"), which claims systems and methods for providing directed media to a user.

16. In addition to disclosing its technology to VERIZON, in 2010, FEEVA also disclosed the projected size of portions of the market and the potential revenue associated with the technology. FEEVA's 2010 projections of market size and the potential revenue associated with the technology, which it shared with VERIZON, proved to be correct: tens of billions of dollars are currently spent each year on target or segment marketing.

17. With the recent explosion of digital media distribution and consumption on the World Wide Web, targeted marketing and market segmentation are increasingly being used to market goods and services over the Internet. Consistent with FEEVA's projections, it is estimated that in the next few years, companies will spend tens of billions of dollars each year on

online advertising campaigns that incorporate targeted marketing and market segmentation strategies, with that expenditure increasing as digital media continues to supplant traditional media. Notably, in 2017, it has been widely reported in the advertising industry that U.S. annual spending on digital advertising has surpassed annual spending on advertising in traditional media.

# VERIZON'S ADOPTION OF THE PATENTED TECHNOLOGY: "VERIZON SELECTS" AND "RELEVANT MOBILE ADVERTISING"

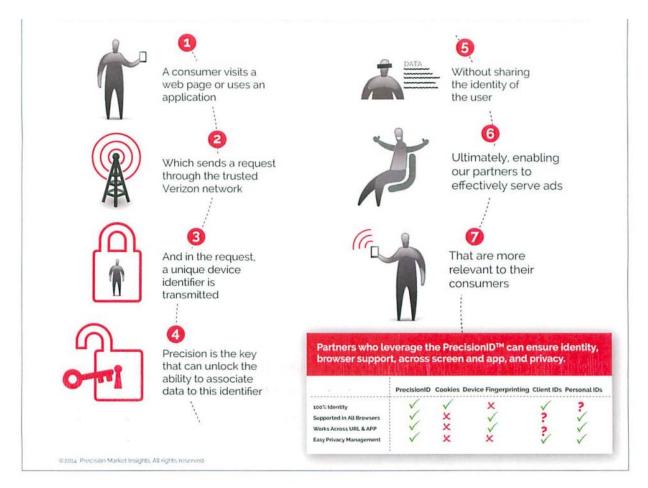
18. PLAINTIFF is informed and believes, and thereby alleges, VERIZON developed a business strategy to secure substantial market share in the markets for segmented and targeted marketing over the Internet in the period that it was meeting with FEEVA and continuing thereafter. VERIZON expressed to FEEVA in 2010 that it might be interested in FEEVA's technology in the future, but declined to enter into a business relationship or license the technology in the interim.

FEEVA ceased operations in late 2010. FEEVA's patents were acquired from
FEEVA by BRIDGE AND POST. BRIDGE AND POST owns all right, title, and interest to the
Patent-In-Suit.

20. In 2012, VERIZON WIRELESS launched two advertising programs: RELEVANT MOBILE ADVERTISING ("RMA") and VERIZON SELECTS. These programs were under VERIZON's Precision Marketing Insights division. BRIDGE AND POST is informed and believes that both programs implement the tagging scheme previously disclosed to VERIZON by FEEVA and claimed in the asserted '314 Patent. VERIZON WIRELESS called the tags User Identification Headers ("UIDH") or PrecisionIDs.

21. Documentation available from the VERIZON Precision Marketing Insights website explained VERIZON SELECTS' use of the unique identifier headers in combination

with "PrecisionID": "1. A consumer visits a web page or uses an application; 2. Which sends a request through the trusted Verizon network; 3. And in the request, a unique device identifier is transmitted; 4. Precision is the key that can unlock the ability to associate data to this identifier; 5. Without sharing the identity of the user; 6. Ultimately, enabling our partners to effectively serve ads; 7. That are more relevant to their consumers."



22. In the VERIZON SELECTS program, VERIZON WIRELESS uses a variety of customer information to develop profiles of participating customers to deliver targeted advertising to those customers. For example, as VERIZON WIRELESS admitted in a consent decree filed with the Federal Communications Commission ("FCC"), VERIZON WIRELESS used the following customer information: (a) addresses of websites visited; (b) device location;

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(c) apps and device features used; (d) postal and e-mail addresses; (e) information about VERIZON products and services usage, including customer proprietary network information (CPNI); and (f) demographic and interest information provided by third parties, such as gender, age range, and interests (e.g., sports fan, frequent diner, or pet owner). Similarly, VERIZON's documentation on its website notes that PrecisionID is superior to traditional audience building tools: "[w]ith the PrecisionID, the guesswork is removed, and advertisers have a way reach their audience that is safer, more accurate, and more effective than other solutions in the mobile advertising space."

23. In the RMA program, launched in 2012, VERIZON WIRELESS used various customer information to deliver targeted advertising to customers who participate in RMA. In RMA, as VERIZON WIRELESS admitted in an FCC/VERIZON WIRELESS consent decree, VERIZON WIRELESS uses the following customer information: (a) postal and e-mail addresses; (b) certain information about VERIZON products and services, such as device type; and (c) demographic and interest categories that VERIZON obtains from other companies, such as gender, age range, and interests.

24. Upon information and belief, VERIZON, in addition to implementing the technology on its network, filed for patents relying upon FEEVA's technology, including U.S. Patent application numbers 13/477,539 and 13/466,578, without permission and without disclosure to FEEVA.

25. On May 22, 2012, VERIZON WIRELESS filed U.S. Patent Application number 13/477,539. The application resulted in U.S. Patent No. 8,832,436 (the '436 Patent), which issued on September 9, 2014, and is titled "Obtaining Targeted Services Using a Unique

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Identifier Header." The claimed systems and methods encompass the technology FEEVA disclosed to VERIZON years earlier.

26. On the same day, May 22, 2012, a VERIZON entity filed U.S. Patent Application No. 13/466,578. The patent issued on June 24, 2014 as U.S. Patent No. 8,763,101 (the '101 Patent), titled "Multi-Factor Authentication Using A Unique Identification Header." The patent describes systems for utilizing UIDHs.

27. On June 10, 2015, a VERIZON entity filed U.S. Patent Application No. 14/735,776 (the '776 Application). The '776 Application was published on October 29, 2015, as U.S. Patent Application Publication No. 2015/0312255, and is titled "Encrypting a Unique Identification Header to Create Different Transactional Identifiers." The '776 application describes combining a UIDH with additional information, such as a subscriber signal byte string that may identify one or more characteristics or attributes of a subscriber, and encrypting the combined UIDH and subscriber signal byte string to create a transactional identifier. On January 3, 2017, the '776 Application was allowed, and on March 13, 2017, the VERIZON entity paid the issue fee. On March 24, 2017, the VERIZON entity submitted to the United States Patent and Trademark Office (USPTO) a Petition to Withdraw From Issue the '776 Application, and simultaneously filed an Information Disclosure Statement citing both BRIDGE AND POST's '747 Patent and US Patent No. 7,657,594 ("the '594 Patent"), also assigned to BRIDGE AND POST, as well as the Complaint in Bridge and Post, Inc. v. Verizon Comm'ns et al., Civil Action No. 3:17-CV-00094-JAG (E.D. Va.), as prior art. On May 2, 2017, the USPTO issued a nonfinal rejection of the claims of the '776 Application under 35 U.S.C. Section 103 over the '747 Patent in view of U.S. Patent Application Publication No. 2005/0259824, in which the examiner described how the '747 Patent discloses features claimed in the '776 Application:

With respect to [independent] claims 1, 8, 15 [of the '776 Application], [the '747 Patent] discloses a system (fig 2) comprising: one or more devices 202-214 (fig 2) to: receive a content request associated with a user device (col 16, lines 57, "*intercepting a request*"), the content request including information that identifiers a subscriber associated with the user device (col 17, lines 1-7, "non-personal information"; col 5, lines 15-17, "UIDs"), and generating, based on receiving the content request a unique identification header (UIDH) by encoding the information that identifiers the subscriber (col 17, lines 14-16, "local user identifier"), determining randomized information (col 17, lines 17-21, "deriving instance information") associated with encrypting the UIDH; encrypting the UIDH to create a transactional identifier (col 17, lines 22-27", "request identifier"), the UIDH being encrypted based on the randomized information (col 17, lines 22-27, "combining and encrypting, ..., instance information"); insert (col 17, lines 28-32) the transactional identifier and the randomized information in the content request to create a modified content request (col 17, lines 28-32, "tagged request"); and provide the modified content request including the transactional identifier and the randomized information (col 17, line 33) (fig 6).

The examiner also described how various features of the dependent claims of the '776 Application are disclosed in the '747 Patent. On May 9, 2017, patent counsel for the VERIZON entity requested an interview with the USPTO examiner regarding the rejection, which was held on June 5, 2017. VERIZON subsequently submitted two additional IDSs, the first on August 18, 2017, and the second on August 22, 2017, each citing additional prior art to the '776 Application.

28. The patent specifications for both the '436 and the '101 patents, as well as the '776 application, note that the UIDHs are suitable for use in mobile phone networks, wired internet, and fiber optic networks.

29. Starting in November 2014, VERIZON WIRELESS's use of the tags to monitor the internet traffic of its mobile phone subscribers was widely reported in press reports, including articles in the Washington Post, USA Today, and Ars Technica.

30. In October 2015, VERIZON disclosed that AOL was making use of the UIDH to serve ads to AOL users using the RMA and VERIZON SELECT programs.

31. In 2016, VERIZON WIRELESS entered a consent decree with FCC. The consent decree described some details of VERIZON WIRELESS's implementations of FEEVA's technology.

32. Following the entry of the consent decree, VERIZON WIRELESS continues to utilize the UIDH in the VERIZON SELECTS and RMA programs. The VERIZON SELECTS Participation Agreement currently available on the VERIZON WIRELESS website notes that the VERIZON SELECTS program uses collected customer information across the entire "Verizon family of companies, including Oath" for any device accessing the internet. VERIZON's website notes that:

> Verizon includes a UIDH in the address information of Internet requests going to Verizon companies (including Oath) and to a small number of partners to help deliver services unrelated to advertising. When you join Verizon Selects, the UIDH may also be shared with partners who provide advertising services. Verizon partners are authorized to use the UIDH only as part of Verizon and AOL services.

> We use these identifiers to help make our advertising programs better by, for example:

- Linking Verizon advertising program information to information Oath has, to provide more personalized advertising
- Serving ads to customers in apps and web browsers that do not use common advertising identifiers
- Helping to determine that different devices have the same user, so Oath can deliver better advertising in more places

33. With respect to the RMA program after the AOL, Inc. and Yahoo! Inc. acquisitions, VERIZON's website states: "Verizon has acquired Yahoo and combined it with AOL to form a new company called Oath. Oath consists of over 50 digital and mobile brands globally, including HuffPost, Yahoo News, Yahoo Sports, Tumblr, and AOL as well as advertising platforms such as ONE by AOL, BrightRoll, and Gemini." The VERIZON website describes how the geographical and demographic data determined from use of UIDH are then

used by OATH's AOL.-branded, Yahoo!-branded, and independently branded content providers, as well as other content providers, to send ads to VERIZON users:

The Relevant Mobile Advertising program uses your postal and email addresses; certain information about your Verizon Wireless products and services (such as device type; and demographic and interest categories you provide or that we get from other companies such as your gender, age range, and interests (i.e. sports fan, frequent diner, or pet owner). This information may be combined with information collected by Oath advertising services from devices you use to access Oath services and visit third-party websites and apps that include Oath advertising services (such as web browsing, app usage, and location), as well as information that we obtain from third-party partners and advertisers.

34. Upon information and belief, with FEEVA's patented technology, DEFENDANTS have been able to profit by implementing and using a network in which DEFENDANTS are able to charge for advertising based on the ability of the DEFENDANTS to target ads utilizing FEEVA's proprietary technologies, including the technologies relating to anonymized tagging. As VERIZON's website notes:

> The best advertising is for something you might actually want, and that is what we want to give you. Verizon Selects uses customer information to help make the ads you see more interesting and useful across the devices and services you use or via mail, email or text when you have approved it. This program shares information with Oath.

35. DEFENDANTS' use of FEEVA's patented inventions was willful and deceitful.

# <u>COUNT I</u> Infringement of U.S. Patent No. 9,659,314

36. BRIDGE AND POST incorporates Paragraphs 1 through 35 herein as if set forth in full.

37. BRIDGE AND POST is the owner by assignment of all rights, title, and interest in the '314 Patent.

38. The '314 Patent is valid and enforceable.

39. VERIZON WIRELESS and AOL/OATH have directly and indirectly infringed, and continue to infringe, at least one claim of the '314 Patent since the '314 Patent issued on May 23, 2017.

40. VERIZON WIRELESS individually and jointly with AOL/OATH, practice at least Claim 1 of the '314 patent through their VERIZON SELECTS and RMA programs, which include the placement and use of the UIDHs. Claim 1 recites:

A method for improving the selection of media for delivery to a targeted user of a client computing device, comprising:

determining user information for a user;

generating a user identifier for the user from the determined user information;

- tagging, with a network routing device, network traffic that is bound for a destination site, the tagging including:
  - generating a request identifier by encrypting the user identifier in an alphanumeric string, and
  - adding the request identifier to the network traffic to generate tagged network traffic;

transmitting the tagged network traffic to the destination site;

receiving from a requester associated with the destination site a decode request to decode the tagged network traffic;

decoding the tagged network traffic to obtain the user identifier;

retrieving stored user information associated with the user identifier; and

transmitting the stored user information to the requester.

41. PLAINTIFF is informed and believes that VERIZON WIRELESS and AOL/OATH directly infringe this claim (and at least one of its dependent claims) by practicing each of these claimed steps in their RMA and VERIZON SELECTS programs. PLAINTIFF is

informed and believes that VERIZON WIRELESS and AOL/OATH also directly infringe each limitation of method claims 20 and 21.

42. In the alternative, on information and belief, VERIZON WIRELESS and AOL/OATH and their third party partner and vendor companies jointly infringe claim 1 of the '314 Patent because VERIZON WIRELESS and AOL/OATH direct or control third party content providers, ad networks, ad exchanges, supply-side platforms, demand-side platforms, and data management platforms, which they contract with as partners and vendors, to practice some of the claimed steps (as one example, a third party partner or vendor may practice the steps of Claim 1 of "receiving from a requester associated with the destination site a decode request to decode the tagged network traffic," "decoding the tagged network traffic to obtain the user identifier," "retrieving stored user information associated with the user identifier," and/or "transmitting the stored user information to the requester") in combination with the steps practiced by VERIZON WIRELESS and AOL/OATH, so that all of the claimed steps are practiced. VERIZON WIRELESS admits that it shares the information it collects "with vendors and partners who do work for us." VERIZON WIRELESS also states with respect to its RMA and SELECTS programs that "[w]e [only share] information that identifies you personally as part of these programs ... with vendors and partners who do work for us. We require that these vendors and partners protect the information and use it only for the services they are providing us." At a minimum, VERIZON WIRELESS and AOL/OATH are indirectly infringing Claim 1 of the '314 Patent at least by inducing infringement.

43. VERIZON WIRELESS and AOL/OATH improve the selection of media for delivery to a targeted user of a client computing device (such as, for example, a VERIZON WIRELESS subscriber using a smartphone or other device) by collecting information about the

user's online activities, making predictions about what products or services may be of interest to the user, and categorizing the user as belonging to a "segment" of users to which advertisers may be interested in showing ads.

44. VERIZON WIRELESS and AOL/OATH determine user information for a user, for example, user information extracted from the header of an HTTP GET request received from a user's client computing device (which, for example, may be information contained in the User-Agent string generated by the user's web browser and transmitted in the HTTP header, such as device type (e.g. iPhone), operating system (e.g. Mac OS X) and version (e.g. OS 3\_2\_1), language (e.g. en\_us), and web browser platform details (e.g. Mozilla 5.0), and/or, as another example, user information stored in VERIZON WIRELESS's authentication servers (e.g. a mobile directory number ("MDN") associated with the user's device).

45. VERIZON WIRELESS and AOL/OATH generate (for example, by using a hash function) a user identifier (for example, a UIDH) for the user from the determined user information (for example, an MDN).

46. VERIZON WIRELESS describes its UIDH as follows:

Header information is included in all web traffic and includes information such as the device type, preferred language, and content support so that the site receiving the request knows how to best display the site on the phone or other device that sends the request. Verizon Wireless includes a Unique Identifier Header (UIDH), a random string of characters, in the address information that accompanies some of the Internet (http) requests transmitted over our wireless network.

Unless you opt out of the Relevant Mobile Advertising program and have not opted in to the Verizon Selects program, a UIDH is included in the address information of Internet requests going to Verizon companies (including Oath) and a small number of partners to help deliver services unrelated to advertising, such as authentication of devices on our network. In addition, with your opt-in consent, for example when you opt in to the Verizon Selects program, the UIDH may be shared with partners who help provide advertising services. Verizon partners are authorized to use the UIDH only as part of Verizon and Oath services and not for their own separate uses. The UIDH does not contain any personally identifiable data and it does not broadcast individuals' historical web browsing activity to advertisers or others.

https://www.verizonwireless.com/support/unique-identifier-header-faqs/

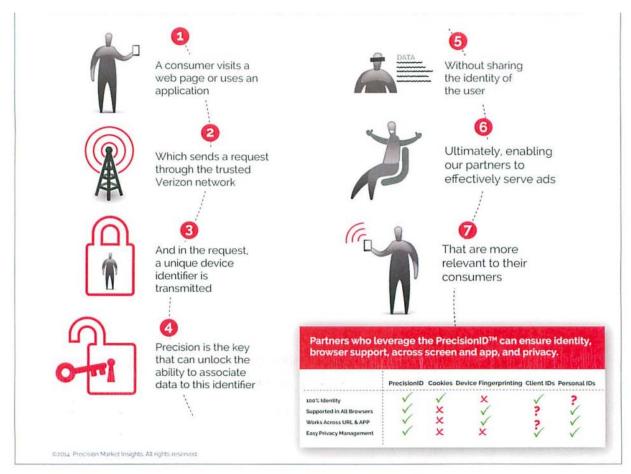
47. VERIZON WIRELESS and AOL/OATH generate a request identifier, for example, by combining and encrypting the UIDH and other information into an alphanumeric string. The request identifier may be a transactional identifier. That other information may include demographic information (e.g. age, household income, etc.). VERIZON WIRELESS and AOL also use geographic location information (e.g. city, ZIP code, GPS, cell tower triangulation information) that is used to target advertisements based upon a subscriber's location. VERIZON SELECTS uses "additional information about [consumer's] use of Verizon services including mobile Web browsing, app and feature usage and location of [consumer's] device. The AOL Advertising Network uses information collected when [consumer] use(s) AOL services and visit third-party websites where AOL provides advertising services (such as Web browsing, app usage, and location), as well as information that AOL obtains from third-party partners and advertisers." Additionally,

The Relevant Mobile Advertising program uses [consumer's] postal and email addresses; certain information about [consumer's] Verizon Wireless products and services such as [consumer's] device type; and demographic and interest information [consumer] provide or [Verizon Wireless] obtain(s) from other companies such as [consumer's] gender, age range and interests (i.e. sports fan, frequent diner or pet owner). This information may be combined with information the AOL Advertising Network collects when [consumer] use(s) AOL services and visit third-party websites where AOL provides advertising services (such as web browsing, app usage and location), as well as information that [Verizon Wireless] or AOL obtain from third-party partners and advertisers. The advertising program uses online and device identifiers including AOL browser cookies, advertising IDs from Apple and Google, and one created by Verizon, known as a Unique Identifier Header or UIDH.

48. VERIZON WIRELESS and AOL/OATH add the request identifier, which

may be a transactional identifier, to the network traffic (for example, via an HTTP GET request) to generate tagged network traffic (which may be a modified HTTP GET request including the transactional identifier).

49. VERIZON WIRELESS and AOL/OATH then transmit the tagged network traffic (such as a modified HTTP GET request including the transactional identifier) to the



destination site (for example, a website) or an ad server (such as a server that is part of OATH) associated with the content provider.

50. VERIZON WIRELESS and AOL/OATH receive from a requester (for example, an ad server, ad network, ad exchange, supply-side platform (SSP), demand-side platform (DSP), or data management platform (DMP)) associated with the destination side (for

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example, a website) a request to decode the tagged network traffic (which may be a modified HTTP GET request including the transactional identifier). The request to decode or decrypt is received by VERIZON WIRELESS and AOL/OATH and/or their partners and vendors receive a request to decode the tagged request by virtue of receiving a modified packet including a transactional identifier that needs to be decoded from an alphanumeric string or decrypted.

51. VERIZON WIRELESS and AOL/OATH decode the tagged network traffic (for example, by decrypting the modified HTTP GET request using a shared key) and retrieve (such as from an authentication, authorization, and accounting server) stored user information (for example, a subscriber profile including one or more attributes of a subscriber) associated with the user identifier (which may be a UIDH).

52. VERIZON WIRELESS and AOL/OATH transmit (for example, within a subscriber string byte signal) the stored user information (for example, such as one or more segments of users with whom the user is categorized) to the requester (for example, an ad server, ad network, ad exchange, SSP, DMP, and/or DMP).

53. On information and belief, VERIZON WIRELESS has had knowledge and notice of the '314 Patent since May 23, 2017, when the patent issued. In addition, BRIDGE AND POST's representative contacted VERIZON in September 2015 to see if VERIZON was interested in a license to the '314 Patent's parent, the '747 Patent. VERIZON WIRELESS and AOL/OATH's infringement is willful, egregious, deliberate and done in bad faith entitling PLAINTIFF to exemplary damages.

54. BRIDGE AND POST has suffered damages because of VERIZON WIRELESS and AOL/OATH's infringement of the '314 Patent.

# **RELIEF REQUESTED**

WHEREFORE, BRIDGE AND POST respectfully requests that this Court grant relief against the DEFENDANTS and in favor of BRIDGE AND POST as follows:

- (a) Judgment that the DEFENDANTS infringe one or more claims of the Patent-in-Suit;
- (b) Judgment that the DEFENDANTS have directly infringed and induced the infringement of the Patent-in-Suit;
- Judgment awarding BRIDGE AND POST damages adequate to compensate it for the DEFENDANTS' infringement of the Patent-in-Suit, including all prejudgment and post-judgment interest;
- (d) Judgment that the DEFENDANTS have willfully infringed and continue to willfully infringe the Patent-in-Suit;
- (e) Judgment awarding BRIDGE AND POST treble damages for willful infringement;
- (f) Judgment that this is an exceptional case and an award of attorneys' fees and expenses; and
- (g) Judgment awarding BRIDGE AND POST such other and further relief as the Court may deem just and proper.

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## DEMAND FOR JURY TRIAL

BRIDGE AND POST demands a jury trial on all claims and issues pursuant to Federal

Rule of Civil Procedure 38(a).

Dated: October 2, 2017

Respectfully submitted,

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