

**IN THE UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF TEXAS
WACO DIVISION**

ALMONDNET, INC., and INTENT IQ, LLC,

Plaintiff,

v.

SAMSUNG ELECTRONICS CO., LTD.;
SAMSUNG ELECTRONICS AMERICA,
INC.; ADGEAR TECHNOLOGIES INC.,

Defendants.

Civil Action No. 6-21-CV-00891-ADA

JURY TRIAL DEMANDED

DEFENDANTS' PRELIMINARY INVALIDITY CONTENTIONS

I. INTRODUCTION

Pursuant to the Court's Joint Schedule (Dkt. 23), Samsung Electronics Co., Ltd., Samsung Electronics America, Inc. (collectively, "Samsung") and Ad Gear Technologies Inc. (collectively, "Defendants") provide these preliminary invalidity contentions to Plaintiffs AlmondNet, Inc., and Intent IQ, LLC (collectively, "Plaintiffs" or "AlmondNet") regarding the currently asserted claims of U.S. Patent Nos. 8,244,582 (the "'582 patent"); 8,200,822 (the "'822 patent"); 8,677,398 (the "'398 patent"); 10,715,878 (the "'878 patent"); 8,566,164 (the "'164 patent"); and 10,321,198 (the "'198 patent") (collectively, the "Asserted Patents"). Defendants reserve the right to provide supplemental contentions in view of additional information or documents received from third parties or that Defendants locate from ongoing investigations.

Plaintiffs presently assert the claims identified in the table below (collectively, the "Asserted Claims").

Patent	Asserted Claims¹
'582 patent	1, 9, 11, 13-16, 19, 20
'822 patent	35-51
'398 patent	1, 2
'878 patent	13-18, 20
'164 patent	1, 3-4, 16, 22
'198 patent	1, 16, 18-25

Defendants provide invalidity contentions for the above-identified Asserted Claims. To the extent AlmondNet is later permitted to assert additional claims, Defendants will amend and supplement these invalidity contentions to address any additional claims. Nothing in these contentions constitutes an admission of validity as to any other non-asserted claims of the asserted patents.

The Court's Standing Order Governing Proceedings – Patent Cases and Joint Schedule contemplates these Invalidity Contentions being prepared and served in response to Plaintiff's Infringement Contentions and the allegations therein regarding Plaintiff's theory of infringement with respect to each Accused Instrumentality. Plaintiff's Infringement Contentions, however, are fundamentally deficient because they fail to provide full, fair, and timely disclosure as to how Defendants allegedly infringe each element of each asserted claim of the Asserted Patents ("Asserted Claims"). Accordingly, Defendants reserve the right to seek leave to amend these Invalidity Contentions as may be appropriate. Defendants also reserve the right to seek leave to amend in light of positions that Plaintiffs or its expert witnesses may assert concerning claim construction, infringement, validity, and/or subject-matter eligibility issues.

Pursuant to the parties' Joint Schedule (Dkt. 23) and based on Defendants' investigation

¹ Plaintiffs' Narrowed Asserted Claims, served February 10, 2022.

and knowledge developed to date, Defendants serve invalidity contentions in the form of (1) charts setting forth where in the prior art references exemplary disclosures for each element of the Asserted Claims is found, (2) an identification of any limitations Defendants contend are indefinite, lack written description, or lack enablement under § 112, and (3) an identification of any claims Defendants contend are directed to ineligible subject matter under 35 U.S.C. § 101. Consistent with the requirements of the Scheduling Order, these contentions do not include bases for unenforceability of the Asserted Patents that Defendants have outside of prior art or 35 U.S.C. §§ 101 (as to claiming patent ineligible subject matter) and 112 (as to indefiniteness, lack of written description and lack of enablement). Contemporaneously with these preliminary invalidity contentions, Defendants produce the prior art referenced herein.

Defendants incorporate by reference all prior art references, charts, theories, and disclosures served on AlmondNet in any prior or pending court action or proceeding before the Patent Trial and Appeal Board, including but not limited to, *AlmondNet, Inc. et al v. Facebook, Inc.*, 6-21-cv-00896 (W.D. Tex., Aug. 27, 2021); *AlmondNet, Inc. et al v. Microsoft Corporation*, 6-21-cv-00897 (W.D. Tex. Aug. 27, 2021); *AlmondNet, Inc. et al v. Amazon.com, Inc. et al*, 6-21-cv-00898 (W.D. Tex. Aug. 27, 2021); *AlmondNet, Inc. v. Roku, Inc.*, 6-21-cv-00876 (W.D. Tex. Aug. 20, 2021); *Roku, Inc. v. AlmondNet, Inc. et al*, 1-21-cv-01035 (D.Del. Jul. 15, 2021); *AlmondNet, Inc. et al v. Roku, Inc.*, 6-21-cv-00731 (W.D. Tex. Jul. 15, 2021); *AlmondNet, Inc. et al v. Oath Holdings Inc.*, 1-19-cv-00247 (D. Del. Feb. 06, 2019); *AlmondNet, Inc. v. Oath Holdings Inc.*, 1-18-cv-00943 (D. Del. Jun. 26, 2018); *Yahoo! Inc. v. ALMONDNET, INC.*, CBM2017-00056 (PTAB Jun. 02, 2017); *Yahoo! Inc. v. ALMONDNET, INC.*, CBM2017-00058 (PTAB Jun. 02, 2017); *Yahoo! Inc. v. AlmondNet, Inc.*, CBM2017-00050 (PTAB May. 15, 2017); *Yahoo! Inc. v. AlmondNet, Inc.*, CBM2017-00051 (PTAB May. 15, 2017); *Yahoo! Inc. v. AlmondNet, Inc.*,

CBM2017-00052 (PTAB May. 15, 2017); *Yahoo! Inc. v. AlmondNet, Inc.*, CBM2017-00049 (PTAB May. 11, 2017); *Yahoo! Inc. v. AlmondNet, Inc.*, CBM2017-00046 (PTAB Apr. 18, 2017); *Yahoo! Inc. v. AlmondNet, Inc.*, CBM2017-00047 (PTAB Apr. 18, 2017); *AlmondNet, Inc. et al v. Yahoo! Inc.*, 1-16-cv-01557 (E.D.N.Y. Mar. 30, 2016); *AlmondNet, Inc. v. Microsoft Corporation*, 3-10-cv-00298 (W.D. Wis. Jun. 02, 2010); *Meta Platforms, Inc. f/k/a Facebook, Inc. v. Intent IQ, LLC et al.*, IPR2022-00773 (PTAB Mar. 28, 2022) (collectively, the “Prior and Pending Actions”).

Should AlmondNet be permitted to assert more or different claims from the Asserted Patents, or any other patents, than it does now, Defendants will identify additional/alternative invalidity grounds and prior art as appropriate and will amend or supplement these invalidity contentions accordingly.

Defendants’ invalidity contentions are based on information reasonably available at this time and may require subsequent amendment, modification, and/or supplementation. Fact discovery has not started, and Defendants have not obtained third-party discovery. Defendants also reserve the right to present additional knowledge and/or information regarding prior art located during the course of discovery or further investigation, for example from consultation with experts, prior art authors, and others. Defendants have not yet obtained deposition testimony from the named inventors of the Asserted Patents. Defendants expect that discovery will reveal not only additional prior art, but also related disclosures and evidence for many of the prior art references identified herein. As such, Defendants have not yet completed their investigation, discovery, or analysis of matters relating to the validity or enforceability of the Asserted Claims. Accordingly, nothing in these invalidity contentions should be construed as a statement that no other persons have discoverable information, that no other documents, data compilations, and/or tangible things exist that Defendants may use to support their claims or defenses, or that no other legal theories or

factual bases will be pursued. Defendants reserve the right to amend, modify and/or supplement these invalidity contentions as additional information is discovered, identified or otherwise appreciated, including testimony about the scope and content of the prior art and the claimed inventions.

Further, these invalidity contentions are based on Defendants' present understanding of AlmondNet's preliminary infringement contentions served on January 7, 2022, and as supplemented on February 28, 2022 ("preliminary infringement contentions"). Nothing in these invalidity contentions should be regarded as conceding that AlmondNet's preliminary infringement contentions are legally or factually adequate or as necessarily reflecting the proper interpretation of the claims or an interpretation of the claims that Defendants agree with or propose. Indeed, AlmondNet's preliminary infringement contentions are incoherent and lack the detail required by the Court's rules. Further, AlmondNet has only served its preliminary infringement contentions. Defendants reserve the right to amend these contentions should AlmondNet raise any new infringement theories in its final infringement contentions or provide any new applications and interpretation of the scope of the claims in those final infringement contentions.

Nothing in these invalidity contentions shall be treated as an admission that any of Defendants' accused technology meets any limitation of the Asserted Claims. Defendants do not infringe any of the Asserted Claims. To the extent that any prior art reference identified by Defendants contains a claim element that is the same as or similar to an element in Defendants' accused technology, inclusion of that reference in Defendants' invalidity contentions shall not be deemed a waiver of any claim construction or non-infringement position. Any use of these invalidity contentions to support any allegation of infringement would be misleading, false, and wrong as a matter of law and fact.

Further, nothing in these contentions constitutes an admission concerning the priority dates, conception dates, or reduction to practice of the Asserted Claims of the Asserted Patents asserted by AlmondNet. Unless otherwise specified, the invalidity contentions set forth herein are based on Plaintiff's contention that each of the Asserted Claims of the Asserted Patents is entitled to the following priority dates:

- The '582 Patent: December 13, 1999;
- The '822 Patent: June 16, 2006;
- The '398 Patent: April 17, 2007;
- The '878 Patent: April 17, 2007;
- The '164 Patent: December 31, 2007; and
- The '198 Patent: December 31, 2007.

To the extent that AlmondNet is later permitted to modify, and in fact modifies in any manner, the alleged priority date for the Asserted Claims of the Asserted Patents, Defendants reserve the right to respond and challenge that date. Defendants further reserve the right to amend and/or supplement these Invalidity Contentions in response to any modification of the alleged priority date.

Defendants have or contemporaneously will be providing disclosures and related documents pertaining to only the Asserted Claims as identified by Plaintiffs in its Infringement Contentions against Defendants. Defendants will further supplement their Invalidity Contentions document production should they later find additional, responsive documents, such as documents produced by third-parties in response to discovery requests.

Each of the Asserted Claims² of the Asserted Patents is invalid for being anticipated by

² For reasons analogous to those identified herein, Defendants contend that all *non-asserted* claims of the Asserted Patents are invalid as anticipated and/or obvious in view of the prior art, or are

and/or obvious in view of one or more items of prior art identified herein, alone or in combination. Specific examples of this anticipation and obviousness, along with the motivation to combine the identified prior art, are set forth in Sections III.A.1-3, III.B.1-3, III.C.1-3, III.D.1-3, III.E.1-3, and III.F.1-3 *infra*. See Exhibits A1-A14, B1-B13, C1-C17, D1-D14; E1-E9; and F1-F9. Each of the Asserted Claims is further invalid for lack of written description, lack of enablement, or indefiniteness, as set forth in Sections III.A.4, III.B.4, III.C.4, III.D.4, III.E.4, and III.F.4 *infra*. Each of the Asserted Claims is further invalid for claiming patent-ineligible subject matter, as set forth in Sections III.A.5, III.B.5, III.C.5, III.D.5, III.E.5, and III.F.5, *infra*. Defendants further reserve the right to assert additional theories of invalidity not addressed or required to be disclosed in these Invalidity Contentions.

II. STATE OF THE ART

The prior art identified herein and discussed in the Exhibits attached hereto may be relied on to show the state of the art prior to Plaintiff's alleged priority dates for the Asserted Patents. This prior art identification is only exemplary and is not in any way intended to limit the scope of what one of ordinary skill in the art would have understood, or the breadth of the state of the art, at this time period. Defendants reserve the right to rely upon additional prior art, information, testimony, and/or knowledge to demonstrate what one of ordinary skill in the art would have understood prior to Plaintiff's alleged priority dates for the Asserted Claims of the Asserted Patents. Defendants may further rely upon the Admitted Prior Art disclosed in the Asserted Patents, including but not limited to the concepts and prior art references discussed therein. Defendants may also rely on patents and/or publications that encompass the state of the art at the time of AlmondNet's alleged priority dates.

indefinite, lack sufficient written description, are not enabled, or claim patent-ineligible subject matter.

Defendants may also rely on certain prior art technologies and/or prior art systems and references as describing or indicating the state of the art, as known to a person of skill in the art, at the time of Plaintiff's alleged priority dates for the Asserted Claims of the Asserted Patents. These include all technologies, systems, and references cited in the Asserted Patents and related patent applications and/or raised during any proceedings before the U.S. Patent and Trademark Office. Defendants may rely on articles, publications, textbooks and/or physical devices to establish the state of the art at the time of Plaintiff's alleged priority dates for the Asserted Claims of the Asserted Patents.

III. IDENTIFICATION OF PRIOR ART

In addition to the prior art identified in the Asserted Patents and their prosecution history, Defendants intend to rely upon the prior art identified below.

The concepts disclosed and claimed in each of the Asserted Patents are not new, and had been disclosed, used, offered for sale, sold, and practiced by others prior to the claimed priority date of the patents. The prior art identified herein and in Exhibits A-F, individually or in combination, invalidates the Asserted Claims under 35 U.S.C. §§ 102 (a), (b), (e), (g) and 103. Because discovery is pending, Defendants expect to gather additional information about the identified prior art, and other prior art, through third party discovery or other discovery, and will thus amend and supplement these invalidity contentions once they obtain that discovery and have reasonable time to analyze it in a meaningful way.

As described in more detail below, claims of the Asserted Patents are also invalid under 35 U.S.C. §§ 101 and 112.

A. THE '582 PATENT

1. IDENTIFICATION OF INVALIDITY GROUNDS

Based on the reasons identified herein and the accompanying charts and references, a

person having ordinary skill in the art would have found the Asserted Claims of the '582 patent invalid under 35 U.S.C. §§ 102 and/or § 103. The '582 patent invalidity charts attached as Exhibits A1-A14 set forth herein, for corresponding limitations of an asserted claim, exemplary disclosures from each identified reference in an invalidity ground below where applicable. Defendants reserve the right to amend their invalidity grounds or charts, or provide supplemental grounds or charts, based on any amendments to Plaintiff's infringement contentions, or information or documents that may be obtained as discovery begins including third party discovery.

Defendants provide the following identification of preliminary and exemplary invalidity grounds for the currently Asserted Claims of the '582 patent:

Claim No.	Exemplary Invalidity Grounds^{3,4} under 35 U.S.C. §§ 102 and/or 103⁵
1	Philyaw in view of Messer Merriman II in view of Howard
9	Philyaw in view of Messer and Groff Merriman II in view of Howard and Groff
11	Same as Claim 1.
13	Philyaw in view of Messer and Vincent Merriman II in view of Howard and Vincent
14	Philyaw in view of Messer and Vincent Merriman II in view of Howard and Vincent

³ For brevity, each reference in this table is identified by its short cite, which is defined later in subsections III.A.2 and III.A.2.b below.

⁴ To the extent the grounds identified in the below table for a particular asserted claim refer back to the grounds identified for another claim, the grounds disclose the particular asserted claim for the reasons identified in the corresponding claim charts for the particular asserted claim.

⁵ Defendants contend that any combination of references identified in this table as a ground invalidates the relevant asserted claim under 35 U.S.C. § 103. In addition, each reference identified by itself as a ground invalidates the relevant asserted claim under 35 U.S.C. §§ 102 and 103, as "it is well settled that a disclosure that anticipates under § 102 also renders the claim invalid under § 103, for anticipation is the epitome of obviousness." *Realtime Data, LLC v. Iancu*, 912 F.3d 1368, 1373 (Fed. Cir. 2019) (internal citations and quotations omitted) (finding no error in § 103 invalidity determination based on a single reference).

Claim No.	Exemplary Invalidity Grounds^{3, 4} under 35 U.S.C. §§ 102 and/or 103⁵
15	Philyaw in view of Messer Merriman II in view of Howard
16	Philyaw in view of Ellard Merriman II in view of Howard and Ellard
19	Same as Claim 9.
20	Philyaw in view of Messer Merriman II in view of Howard

2. IDENTIFICATION OF INVALIDITY DUE TO ANTICIPATION

The table below lists the prior art references that anticipate one or more of the Asserted Claims of the '582 patent under 35 U.S.C. § 102. The attached claim charts in Exhibits A1-A14 demonstrate where each limitation of the Asserted Claims is found in the references listed below, either expressly or inherently in the larger context of the passage, as understood by a person having ordinary skill in the art. The following references are prior art under at least 35 U.S.C. §§ 102(a), (b), or (e).

a. Prior Art Patents and Patent Publications That Anticipate the Asserted Claims of the '582 Patent

Patent No.	Filing Date / Priority Date	Date of Issue or Publication	Short Cite
US6836799	Aug 24, 1999	Dec. 28, 2004	Philyaw
US5991740	Jun. 10, 1997	Nov. 23, 1999	Messer
US5991758	Jun. 6, 1997	Nov. 23, 1999	Ellard
US5588119	Aug. 23, 1993	Dec. 24, 1996	Vincent
US5787411	Mar. 20, 1996	Jul. 28, 1998	Groff
US8566154	Jul. 27, 1999	Oct. 22, 2013	Merriman I
US5948061	Oct. 29, 1996	Sep. 7, 1999	Merriman II
US6839680	Sep. 30, 1999	Jan. 4, 2005	Liu
US6133912	May 4, 1998	Oct. 17, 2000	Montero
US6415322	Feb. 26, 1999	Jul. 2, 2002	Jaye
US5999971	Jun. 23, 1998	Dec. 7, 1999	Buckland
US6584505	Jul. 8, 1999	Jun. 24, 2003	Howard
US6073241	Aug. 29, 1996	Jun. 6, 2000	Rosenberg

b. Prior Art Systems/Services That Anticipate the Asserted Claims of the '582 Patent

System/Service	Relevant Dates	Persons/Entities Involved in Prior Use, Sale, and/or Offers for Sale	Short Cite
Engage	At least as early as Oct. 1999	Engage Technologies, Inc. (defunct)	Engage

3. IDENTIFICATION OF INVALIDITY DUE TO OBVIOUSNESS

The tables below list prior art references that render one or more of the Asserted Claims of the '582 patent invalid as obvious under 35 U.S.C. § 103, alone or in combination with the knowledge of a person having ordinary skill in the art and/or other prior art. The attached claim charts in Exhibits A1-A14 demonstrate where each limitation of the Asserted Claims is found in the references listed below, either expressly or inherently in the larger context of the passage, as understood by a person having ordinary skill in the art. The following references are prior art under at least 35 U.S.C. §§ 102(a), (b), or (e).

a. Prior Art Patents and Patent Publications That Render Obvious the Asserted Claims of the '582 Patent

Patent or Patent Publication No.	Filing Date / Priority Date	Date of Issue or Publication	Short Cite
US6836799	Aug 24, 1999	Dec. 28, 2004	Philyaw
US5991740	Jun. 10, 1997	Nov. 23, 1999	Messer
US5991758	Jun. 6, 1997	Nov. 23, 1999	Ellard
US5588119	Aug. 23, 1993	Dec. 24, 1996	Vincent
US5787411	Mar. 20, 1996	Jul. 28, 1998	Groff
US8566154	Jul. 27, 1999	Oct. 22, 2013	Merriman I
US5948061	Oct. 29, 1996	Sep. 7, 1999	Merriman II
US6839680	Sep. 30, 1999	Jan. 4, 2005	Liu
US6133912	May 4, 1998	Oct. 17, 2000	Montero
US6415322	Feb. 26, 1999	Jul. 2, 2002	Jaye
US5999971	Jun. 23, 1998	Dec. 7, 1999	Buckland
US6584505	Jul. 8, 1999	Jun. 24, 2003	Howard
US6073241	Aug. 29, 1996	Jun. 6, 2000	Rosenberg

b. Prior Art Systems/Services That Render Obvious the Asserted Claims of the '582 Patent

System/Service	Relevant Dates	Persons/Entities Involved in Prior Use, Sale, and/or Offers for Sale	Short Cite
Engage	At least as early as Oct. 1999	Engage Technologies, Inc. (defunct)	Engage

c. Motivations for Combining Prior Art

The '582 patent is invalid in view of the combinations of references disclosed above. A person having ordinary skill in the art at the effective filing date of the '582 patent (a "POSITA") would have naturally consulted each of these references and combined the teachings, for at least the reasons provided below. Accordingly, a POSITA would have been motivated to combine elements of the references identified above, recognizing that the combination would be a predictable use of elements known in the art to solve known problems by using known techniques, resulting in expected outcomes. Defendants' expert(s) may further explain the motivation to combine prior art and why the asserted claims of the asserted patents are invalid as obvious in accordance with the case schedule. Nothing herein is intended to limit or preclude such future expert opinion.

A POSITA would have understood the references listed above, alone or in combination, to contain explicit and/or implicit teaching, suggestion, and/or rationales to combine them for at least the following exemplary reasons.⁶

⁶ In *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398 (2007), the Supreme Court held that prior art need not disclose the precise teachings of a patented invention to render it obvious, because a court "can take account of the inferences and creative steps that a person of ordinary skill in the art would employ." *Id.* at 418. Under *KSR*, an explanation for why a combination of prior art items renders a claim obvious may be found in the "interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art." *Id.* at 418.

Group A: “Profile Updating Art”

Claims 1 and 11 of the '582 patent recite limitations relating to updating user profiles used in targeted advertising, and the references identified below that disclose and/or suggest the obviousness of the claimed subject matter are categorized as “Profile Updating Art” references for the purposes of these contentions and the disclosure of obviousness combinations.

Nothing about the claimed subject matter adds anything novel or non-obvious over the prior art. To the contrary, the claimed subject matter was well-known, routine, conventional, and widely available long before the alleged invention, as reflected in the disclosures of references cited in the claim charts submitted herewith that Defendant may rely upon. The implementation and use of the claimed subject matter also would have been obvious to a person of ordinary skill in the art least because doing so would have involved the combination of prior art elements according to known methods to yield predictable results, the simple substitution of one known element for another to obtain predictable results, the application of a known technique to a known device ready for improvement to yield predictable results, and/or would have been obvious to try. A person of ordinary skill in the art would have readily appreciated the well-known and widespread use of this subject matter and the associated benefits and advantages of their use. Moreover, references from the time of the purported invention of the patent in similar and related fields disclosed relevant teachings reflecting motivations to combine, as reflected in the subject matters cited and presented in the claim charts submitted herewith and/or referenced below, which Defendant may rely upon.

- Philyaw (describes updating database based on user’s search activity and using the database for targeted advertisement)
- Merriman I (describes maintaining a database that logs user activity to re-target

advertisements)

- Merriman II (describes collecting user information about which advertisements were clicked on and using that information to target advertisements)
- Liu (describes updating user's category interest information over time to enable targeted content delivery)
- Montero (describes obtaining profile data about users and transmitting targeted advertisement based on demographic information from the profile data)
- Jaye (describes compiling a global user profile about users without revealing the identity of a user and disclosing to advertisers)
- Engage (describes compiling database on user profiles based on interests and demographic/geographic information for targeted advertisement)

Group B: "User Information Tracking Art"

Claims 1 and 11 of the '582 patent recite limitations relating to identifying and/or tracking users to collect information about those users, and the references identified below that disclose and/or suggest the obviousness of the claimed subject matter are categorized as "User Information Tracking Art" references for the purposes of these contentions and the disclosure of obviousness combinations.

Nothing about the claimed subject matter adds anything novel or non-obvious over the prior art. To the contrary, the claimed subject matter was well-known, routine, conventional, and widely available long before the alleged invention, as reflected in the disclosures of references cited in the claim charts submitted herewith that Defendant may rely upon. The implementation and use of the claimed subject matter also would have been obvious to a person of ordinary skill in the art least because doing so would have involved the combination of prior art elements

according to known methods to yield predictable results, the simple substitution of one known element for another to obtain predictable results, the application of a known technique to a known device ready for improvement to yield predictable results, and/or would have been obvious to try. A person of ordinary skill in the art would have readily appreciated the well-known and widespread use of this subject matter and the associated benefits and advantages of their use. Moreover, references from the time of the purported invention of the patent in similar and related fields disclosed relevant teachings reflecting motivations to combine, as reflected in the subject matters cited and presented in the claim charts submitted herewith and/or referenced below, which Defendant may rely upon.

- Messer (describes placing a cookie to track a later purchase based on a presented advertisement)
- Buckland (describes identifying a user by placing a cookie on the user's browser)
- Rosenberg (describes tracking a user across distinct domains by placing a cookie)
- Howard (describes authenticating a user for accessing a network server and providing a cookie that contains user profile information after authentication)
- Vincent (describes identifying a device by node identification information associated with the device within the LAN)

Group C: "Database Art"

Claims 1 and 11 of the '582 patent recite limitations relating to generic database features, and the references identified below that disclose and/or suggest the obviousness of the claimed subject matter are categorized as "Database Art" references for the purposes of these contentions and the disclosure of obviousness combinations.

Nothing about the claimed subject matter adds anything novel or non-obvious over the

prior art. To the contrary, the claimed subject matter was well-known, routine, conventional, and widely available long before the alleged invention, as reflected in the disclosures of references cited in the claim charts submitted herewith that Defendant may rely upon. The implementation and use of the claimed subject matter also would have been obvious to a person of ordinary skill in the art least because doing so would have involved the combination of prior art elements according to known methods to yield predictable results, the simple substitution of one known element for another to obtain predictable results, the application of a known technique to a known device ready for improvement to yield predictable results, and/or would have been obvious to try. A person of ordinary skill in the art would have readily appreciated the well-known and widespread use of this subject matter and the associated benefits and advantages of their use. Moreover, references from the time of the purported invention of the patent in similar and related fields disclosed relevant teachings reflecting motivations to combine, as reflected in the subject matters cited and presented in the claim charts submitted herewith and/or referenced below, which Defendant may rely upon.

- Ellard (describes determining whether there is a match between existing data and incoming data)
- Groff (describes selectively filtering/retrieving records to be presented on the computer's display from a stored database)

Group A references relate to updating user profiles used in targeted advertising. Any reference in Group A can be combined with any other reference in Group A at least because a person of ordinary skill in the art (POSITA) would have known that substituting elements of one reference would have been a simple substitution of one known element for another to obtain predictable results, or the use of a known technique to improve similar devices (methods, or

products) in the same way, or applying a known technique to a known device (method, or product) ready for improvement to yield predictable results, or simply combining prior art elements according to known methods to yield predictable results. For example, Montero discloses obtaining user profile data “from a questionnaire profile form,” but to the extent it does not expressly disclose receiving profile data by URL redirection, it could have been combined with Merriman II. Merriman II expressly discloses collecting information about the user by URL redirection. One of ordinary skill in the art would have been motivated to combine Montero with Merriman II to be able to use and benefit from URL redirection as described in Merriman II as an alternative means of collecting user information. A POSITA would have recognized this combination in this fashion as a simple substitution of collecting user profile data by URL redirection in Merriman II for collecting the same data “from a questionnaire profile form” in Montero and whose substitution would have provided no more than predictable results.

Similarly, Group B references relate to identifying and/or tracking users to collect information about those users. Any reference in Group B could be combined with any other reference in Group B at least because a person of ordinary skill in the art (POSITA) would have known that substituting elements of one reference would have been no more than a simple substitution of one known element for another to obtain predictable results, or the use of a known technique to improve similar devices (methods, or products) in the same way, or applying a known technique to a known device (method, or product) ready for improvement to yield predictable results, or simply combining prior art elements according to known methods to yield predictable results. For example, to the extent Vincent does not expressly disclose collecting user profile data, Messer expressly discloses placing a cookie to collect user profile data (e.g., whether a purchase is made or not). One of ordinary skill in the art would have been motivated to combine Vincent

with Messer in order to implement the use of a cookie to collect user profile data in the system of Vincent. One of ordinary skill in the art would have recognized that both relate to identifying users and/or devices based on access to the network and/or web site and it would have been obvious to try collecting user profile data from the identified device in Vincent as no more than the a selection of an identified, predictable solution with a reasonable expectation of success and such a combination of prior art elements according to known methods would have yielded no more than a predictable result.

Further, any reference in Group A could have been combined with any reference in Group B, at least because the Group A references relate to updating user information, and Group B references relate to identifying and tracking users to collect user information. One of ordinary skill in the art would have been motivated to combine references in Group A with references in Group B at least in order be able to benefit from the combination of tracking user info and updating user info in the same system or method as more information is learned about the user. One of ordinary skill in the art would have recognized this sort of combination at least as the combination of known techniques to know devices (methods, or products) ready for improvement to yield predictable results.

Further, any reference in Group A and/or Group B could have been combined with any reference in Group C, at least in part because such references reside within the same field of technology, and a POSITA would have understood that one would combine the user profile database of a reference from A and/or B and implementing basic database functionalities as in a reference from Group C because the references in Group C were intended to work with any system that utilizes databases. This would have been no more than the simple combination of known elements ready for improvement, and it would have been obvious to try to implement generic

database features on a user profile database with a reasonable expectation of success.

4. INVALIDITY UNDER § 112

The Asserted Claims of the '582 patent are invalid under 35 U.S.C. § 112. The Asserted Claims lack a written description and enabling disclosure commensurate with the alleged scope of the claims, are unduly vague and indefinite, and/or contain purely functional language. The '582 patent, read in light of the specification and prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the purported invention. *See Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 901 (2014). The '582 patent does not enable one of skill in the art to practice the full scope of the claims without undue experimentation. The '582 patent does not enable one of skill in the art to practice the scope of the claims as set forth in AlmondNet's preliminary infringement contentions.

The following identification of claims/claim elements are only exemplary and Defendants reserve the right to supplement the identification of claims and claim elements that do not comply with the requirements of 35 U.S.C. § 112. Specifically, to the extent an element identified below, or its variation, appears in claims other than the ones specified below, it also renders those additional claims invalid under 35 U.S.C. § 112. Claims that depend on these additional claims and on the claims identified below are also invalid under 35 U.S.C. § 112. Defendants reserve the right to identify additional claims and claim elements that do not comply with the requirements of 35 U.S.C. § 112 should AlmondNet make further allegations based on claim scope lacking the requisite § 112 support, including in its final infringement contentions. Furthermore, this identification of claims/claim elements should not be interpreted as reflecting Defendants' position on the construction of any claim/claim element.

Defendants further reserve the right to identify additional claims and claim elements that do not comply with the requirements of 35 U.S.C. § 112 in view of any information or arguments

Plaintiffs may offer with respect to the non-obviousness, enablement, written description, or any other characterization of any claim elements or prior art references. This includes, without limitation, any opinions provided by any expert in this case or any Prior or Pending Action, or any representations or arguments Plaintiffs may make in this case or any Prior or Pending Action.

At least the following claims, and all claims depending on these claims, are invalid for failing to meet the requirements of 35 U.S.C. § 112:

Claim Element	Patent (Claims)	§ 112 Grounds
“indicia of instructions”	11, 15, 16, 19, 20	Indefinite pursuant to pre-AIA § 112, para. 2 Lack of written description pursuant to pre-AIA § 112, para. 1 Lack of enablement pursuant to pre-AIA § 112, para. 1
“unaffiliated third parties”	1, 11, 15	Indefinite pursuant to pre-AIA § 112, para. 2 Lack of written description pursuant to pre-AIA § 112, para. 1 Lack of enablement pursuant to pre-AIA § 112, para. 1
“believed to be related”	1, 11, 13	Indefinite pursuant to pre-AIA § 112, para. 2 Lack of written description pursuant to pre-AIA § 112, para. 1 Lack of enablement pursuant to pre-AIA § 112, para. 1
“maintained profile particular profile attributes”	1, 11	Indefinite pursuant to pre-AIA § 112, para. 2 Lack of written description pursuant to pre-AIA § 112, para. 1 Lack of enablement pursuant to pre-AIA § 112, para. 1
“automatically”	1, 9, 11, 14-16, 19, 20	Indefinite pursuant to pre-AIA § 112, para. 2 Lack of written description pursuant to pre-AIA § 112, para. 1 Lack of enablement pursuant to pre-AIA § 112, para. 1

Claim Element	Patent (Claims)	§ 112 Grounds
“source thereof”	9, 19	Indefinite pursuant to pre-AIA § 112, para. 2 Lack of written description pursuant to pre-AIA § 112, para. 1 Lack of enablement pursuant to pre-AIA § 112, para. 1

5. INVALIDITY UNDER § 101

In addition to the other grounds of invalidity set forth herein, Defendants contend that the Asserted Claims of the Asserted Patents are invalid under 35 U.S.C. § 101 for at least the following reasons. The Subject-Matter Eligibility Contentions set forth below, pursuant to the Court’s Standing Order Regarding Subject-Matter Eligibility Contentions, are subject to revision and amendment pursuant to Federal Rule of Civil Procedure 26(e) to the extent appropriate in light of further investigation and discovery, the Court’s construction of the Asserted Claims, and/or the positions taken during expert discovery. In making these Subject-Matter Eligibility Contentions, Defendants hereby incorporate by reference the discussion of the state of the art, set forth in Section II, *supra*, the identification of prior art, set forth in Section III, *supra*, as well as the Exhibits attached hereto. Defendants intend to rely on those materials in challenging the subject-matter eligibility of the Asserted Claims.

35 U.S.C. § 101 lists four broad categories of patent-eligible subject matter but is subject to “an important implicit exception” that “[l]aws of nature, natural phenomena, and abstract ideas,” which form the “basic tools of scientific and technological work,” are not eligible for patent protection. *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 573 U.S. 208, 216 (2014) (internal quotation marks omitted). “The ‘abstract ideas’ category embodies ‘the longstanding rule that an idea of itself is not patentable.’” *Id.* at 209 (quoting *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972) (quoting *Rubber-Tip Pencil Co. v. Howard*, 87 U.S. 498 (1874))).

Alice set forth a two-step inquiry. “First, we determine whether the claims at issue are directed to one of those patent-ineligible concepts.” *Id.* at 217. In making this inquiry, the claims “must be considered as a whole.” *Alice*, 573 U.S. at 218 n.3 (quoting *Diamond v. Diehr*, 450 U.S. 175, 188 (1981)). If the claims recite an abstract idea, the second step requires a “search for an ‘inventive concept’— an element or combination of elements that is ‘sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.’” *Id.* at 218 (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 73 (2016)). “A claim that recites an abstract idea must include ‘additional features’ to ensure ‘that the claim is more than a drafting effort designed to monopolize the abstract idea.’” *Id.* at 221 (quoting *Mayo*, 566 U.S. at 78) (alterations omitted). The recited “additional features must be more than well-understood, routine, conventional activity.” *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 1335, 1339 (Fed. Cir. 2013) (internal quotations omitted). In the realm of computer-implemented inventions, merely adding “purely functional and generic” components does not “transform an abstract idea into a patent-eligible invention” because “[n]early every computer will include [such components] capable of performing the basic . . . functions required by the . . . claims.” *Alice*, 573 U.S. at 226. The asserted claims of the ’582 patent fail to meet that standard.

Indeed, the Federal Circuit has repeatedly found similar claims relating to targeted or tailored advertising or content display to be invalid under 35 U.S.C. § 101. *Bridge & Post, Inc. v. Verizon Comms., Inc.*, 778 F. App’x 882, 884–85, 889 (Fed. Cir. July 5, 2019) (invalidating patents described as “tracking a user’s computer network activity and using information gained about the user to deliver targeted media, such as advertisements,” noting that the “concept of tailoring advertisements based on user data . . . dates back to at least local radio and television ad[s],” which played for users located in specific cities and that in the “computer context, prior art

systems tracked users using “cookies,” which allowed “a user’s location [to] be approximately determined by the IP address of their device.”); *Customedia Techs., LLC v. Dish Network Corp.*, 951 F.3d 1359, 1363-64 (Fed. Cir. 2020) (“using a computer to deliver targeted advertising to a user” is an abstract idea, not “improvement in the functioning of a computer”).

Alice Step One: The asserted claims of the ’582 patent are directed to an abstract idea, for example the abstract idea of automatically receiving and storing profile information about an entity based on a referral from a webpage and automatically storing the source of said information. *See* ’582 patent at claim 1. Each of the independent claims comprises essentially the same basic steps: (1) receiving, (2) and storing profile information from URL redirection, (3) storing the profile information to a maintained profile, and (4) storing the source of the profile information. *See, e.g.*, ’582 patent at claims 1, 11. But the claims disclose no specific technological solution for doing so, instead leaving the POSITA to achieve the claimed results using existing or yet-to-be-invented technology.

The asserted dependent claims are also directed to the same abstract idea of automatically receiving and storing profile information about an entity based on a referral from a webpage and automatically storing the source of said information. Thus, all asserted claims of the ’582 patent are directed to an abstract idea.

As the Federal Circuit has explained, “An abstract idea can generally be described at different levels of abstraction.” *Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1240 (Fed. Cir. 2016). The abstract ideas offered herein are exemplary, and additional abstract ideas at different levels of abstract may be appropriate. This case is still in its early stages; Defendants reserve the right to provide supplemental contentions in view of information or documents received from Plaintiffs or third parties or that Defendants locate from ongoing investigation, or in response to

determinations by this Court. Defendants reserve the right to adopt additional or different descriptions of the abstract idea to which the Asserted Claims are directed, including, without limitation, abstract ideas as identified by other Defendants in any prior or pending court action or proceeding, including but not limited to, the Prior and Pending Actions, which Defendants incorporate by reference herein.

Alice Step Two: The asserted claims of the '582 patent does not recite an inventive concept sufficient to transform their subject matter into something more than the abstract idea. Each and every limitation of the '582 patent claims was well-understood, routine, and conventional as of the priority dates of the '582 patent, as demonstrated by the references provided in Sections III.A.2 and III.A.2.b and described in detail above. The '582 patent claim nothing more than this idea, rather than any specific inventive application of this idea. *See Affinity Labs of Tex., LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1262 (Fed. Cir. 2016) (internal citation omitted). There are no “additional features” in the claims that account for more than “well-understood, routine, conventional activity.” *See id.*

As such, similar to *Affinity Labs*, where the Court found the claims ineligible under § 101, the claims and the shared specification do not contain an “inventive concept that transforms the abstract idea” of automatically receiving and storing profile information about an entity based on a referral from a webpage and automatically storing the source of said information “into a patent-eligible application of that abstract idea.” *See Affinity Labs*, 838 F.3d at 1262. The asserted claims of the '582 patent recite only generic components and/or insignificant post-solution activity, without any specific technical solution or improvement to existing technologies to implement the underlying idea, and thus add nothing inventive to the claims. This is insufficient to transform the claimed abstract idea into patent-eligible subject matter. *See, e.g., Alice*, 573 U.S. at 225-26

(holding that “implement[ing] the abstract idea . . . on a generic computer” was not sufficient “to transform an abstract idea into a patent-eligible invention”); *Intellectual Ventures I*, 850 F.3d at 1341-42 (holding that “using generic computer components and conventional computer data processing activities” was not sufficient to find an “inventive concept”); *In re TLI Commc’ns LLC Pat. Litig.*, 823 F.3d 607, 614 (Fed. Cir. 2016) (“[G]eneric computer components [are] insufficient to add an inventive concept to an otherwise abstract idea.”); *Two-Way Media*, 874 F.3d at 1339 (“Nothing in the claims or their constructions. . . . requires anything other than conventional computer and network components operating according to their ordinary functions.”). The dependent claims merely narrow the abstract idea, and thus also add nothing inventive. *See Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat’l Assoc.*, 776 F.3d 1343, 1349 (Fed. Cir. 2014) (dependent claims of narrower scope and using conventional techniques are non-inventive). Therefore, the asserted claims of the ’582 patent are ineligible under § 101.

Defendants also incorporate by reference the patent ineligibility analyses as disclosed in *Yahoo! Inc. v. AlmondNet, Inc.*, CBM2017-00052 (PTAB).

As mentioned, each and every limitation of the asserted ’582 patent claims was well-understood, routine, and conventional as of the priority dates of the ’582 patent. For example, without limitation, the following limitations and/or concepts were well-understood, routine, and conventional—both as individual concepts and in an ordered combination in the claim—as of the priority dates of the ’582 patent:

- collecting profiles of Internet-using entities
- electronically receiving at a programmed computer system coupled to a global computer network, from at least one server controlled by one of a plurality of unaffiliated third parties a partial profile of an entity that uses a user computer coupled to the global computer network

- accessing a website,
- a partial profile available to one of the third parties and contains at least one profile attribute related to the entity
- automatically with the computer system storing the received partial profile
- automatic electronic URL redirection
- receiving a partial profile achieved as a result of automatic electronic URL redirection from a portion of a page of the website accessed by the user computer
- electronically adding the received partial profile to a maintained profile
- automatically with the computer system electronically adding the received partial profile to a maintained profile believed to be related to the same entity
- automatically with the computer system generating and storing an electronic record of which of the plurality of unaffiliated third parties contributed to the maintained profile particular profile attributes
- data used in targeting third-party advertisements to the user computer over the global computer network
- wherein the maintained profile, including the added partial profile, comprises data used in targeting third-party advertisements to the user computer over the global computer network
- automatically with the computer system selecting profile attributes from the maintained profile based on the source thereof
- a tangible, non-transitory data storage medium comprising indicia of instructions for a processor to perform a method of collecting profiles of Internet-using entities

- the computer system adding the received partial profile to a maintained profile believed related to the same entity on account of the received partial profile and the maintained profile being related to the same user computer
- automatically reading a cookie on the user computer
- the computer system determines that the received partial profile and the maintained profile are related to the same user computer by automatically reading a cookie on the user computer
- the indicia of instructions instruct the processor to perform a method
- maintaining an electronic record
- profile attributes used in targeting the advertisements
- automatically with the computer system electronically maintaining an electronic record of which unaffiliated third party contributed, to the maintained profile, the profile attributes used in targeting the advertisements
- partial profile
- profile attributes
- automatically with the computer system electronically determining whether the received partial profile contains any profile attributes about the entity that were not previously contained in a maintained profile
- profile attributes
- maintained profile

- automatically with the computer system selecting profile attributes from the maintained profile based on the source thereof
- URL redirection
- electronically reading a cookie previously stored on the entity's computer
- automatically with the computer system electronically reading a cookie previously stored on the entity's computer, as a result of the URL redirection.

Defendants further reserve their right to submit and rely upon expert testimony in support of its arguments regarding patent ineligibility.

B. THE '822 PATENT

1. IDENTIFICATION OF INVALIDITY GROUNDS

Based on the reasons identified herein and the accompanying charts and references, a person having ordinary skill in the art would have found the Asserted Claims of the '822 patent invalid under 35 U.S.C. §§ 102 and/or 103. The '822 patent invalidity charts attached as Exhibits B1-B13 set forth herein, for corresponding limitations of an asserted claim, exemplary disclosures from each identified reference in an invalidity ground below where applicable. Defendants reserve the right to amend their invalidity grounds or charts, or provide supplemental grounds or charts, based on any amendments to Plaintiff's infringement contentions, or information or documents that may be obtained as discovery begins including third party discovery.

Defendants provide the following identification of exemplary invalidity grounds for the currently Asserted Claims of the '822 patent:

Claim No.	Exemplary Invalidity Grounds^{7, 8} under 35 U.S.C. §§ 102 and/or 103⁹
35	Burdick Detering Beyda Perry in view of Bronson Fernandes in view of Detering
36	McFadden
37	McFadden in view of Beyda Fernandes in view of Detering
38	Beyda McFadden in view of Detering
39	Perry Burdick McFadden Fernandes Beyda
40	Perry Burdick
41	Perry Burdick McFadden Fernandes Beyda

⁷ For brevity, each reference in this table is identified by its short cite, which is defined later in subsections III.B.2 and III.B.2.b below.

⁸ To the extent the grounds identified in the below table for a particular asserted claim refer back to the grounds identified for another claim, the grounds disclose the particular asserted claim for the reasons identified in the corresponding claim charts for the particular asserted claim.

⁹ Defendants contend that any combination of references identified in this table as a ground invalidates the relevant asserted claim under 35 U.S.C. § 103. In addition, each reference identified by itself as a ground invalidates the relevant asserted claim under 35 U.S.C. § 102 and 103.

Claim No.	Exemplary Invalidity Grounds^{7, 8} under 35 U.S.C. §§ 102 and/or 103⁹
42	Perry McFadden Beyda Burdick in view of Detering Fernandes in view of Detering
43	Perry Fernandes
44	Beyda Beyda in view of Perry
45	Beyda in view of Detering
46	Beyda in view of Perry
47	Perry Fernandes
48	Bronson in view of Beyda Burdick in view of Detering
49	Perry in view of Beyda Beyda in view of Perry
50	Petrovic in view of Beyda Petrovic in view of Detering
51	Burdick Burdick in view of Petrovic McFadden in view of Petrovic

2. IDENTIFICATION OF INVALIDITY DUE TO ANTICIPATION

The table below lists the prior art references that anticipate one or more of the Asserted Claims of the '822 patent under 35 U.S.C. § 102. The attached claim charts in Exhibits B1-B13 demonstrate where each limitation of the Asserted Claims is found in the references listed below, either expressly or inherently in the larger context of the passage, as understood by a person having

ordinary skill in the art. The following references are prior art under at least 35 U.S.C. §§ 102(a), (b), or (e).

a. Prior Art Patents and Patent Publications That Anticipate the Asserted Claims of the '822 Patent

Patent No. / Patent Publ. No.	Filing Date / Priority Date	Date of Issue or Publication	Short Cite
US20040215515	Jan. 16, 2004	Oct. 28, 2004	Perry
US20070260514	May 5, 2006	Nov. 8, 2007	Burdick
US7899801	Dec. 10, 2003	Mar. 1, 2011	Bronson
US20050086109	Sep. 28, 2004	Apr. 21, 2005	McFadden
US20030040958	Feb. 28, 2000	Feb. 27, 2003	Fernandes
US2002116313	Dec. 14, 2000	Aug. 22, 2002	Detering
US20050165644	Dec. 17, 2004	Jul. 28, 2005	Beyda
US20050132222	Dec. 12, 2003	Jun. 16, 2005	Petrovic
US20090106100	Oct. 17, 2007	Apr. 23, 2009	Mashinsky
US6584505	Jul. 8, 1999	Jun. 24, 2003	Howard
US7822636	Jul. 1, 2000	Oct. 26, 2010	Ferber

b. Prior Art Systems/Services That Anticipate the Asserted Claims of the '822 Patent

System/Service	Relevant Dates	Persons/Entities Involved in Prior Use, Sale, and/or Offers for Sale	Short Cite
Doubleclick	At least as early as 2006	Google, Inc.	Doubleclick
TACODA	At least as early as 2006	TACODA Systems, Inc.	TACODA

3. IDENTIFICATION OF INVALIDITY DUE TO OBVIOUSNESS

The tables below list prior art references that render one or more of the Asserted Claims of the '822 patent invalid as obvious under 35 U.S.C. § 103, alone or in combination with the knowledge of a person having ordinary skill in the art and/or other prior art. The attached claim charts in Exhibits B1-B13, respectively, demonstrate where each limitation of the Asserted Claims is found in the references listed below, either expressly or inherently in the larger context of the passage, as understood by a person having ordinary skill in the art. The following references are

prior art under at least 35 U.S.C. §§ 102(a), (b), or (e).

a. Prior Art Patents and Patent Publications That Anticipate the Asserted Claims of the '822 Patent

Patent No. / Patent Publ. No.	Filing Date / Priority Date	Date of Issue or Publication	Short Cite
US20040215515	Jan. 16, 2004	Oct. 28, 2004	Perry
US20070260514	May 5, 2006	Nov. 8, 2007	Burdick
US7899801	Dec. 10, 2003	Mar. 1, 2011	Bronson
US20050086109	Sep. 28, 2004	Apr. 21, 2005	McFadden
US20030040958	Feb. 28, 2000	Feb. 27, 2003	Fernandes
US2002116313	Dec. 14, 2000	Aug. 22, 2002	Detering
US20050165644	Dec. 17, 2004	Jul. 28, 2005	Beyda
US20050132222	Dec. 12, 2003	Jun. 16, 2005	Petrovic
US20090106100	Oct. 17, 2007	Apr. 23, 2009	Mashinsky
US6584505	Jul. 8, 1999	Jun. 24, 2003	Howard
US7822636	Jul. 1, 2000	Oct. 26, 2010	Ferber

b. Prior Art Systems/Services That Anticipate the Asserted Claims of the '822 Patent

System/Service	Relevant Dates	Persons/Entities Involved in Prior Use, Sale, and/or Offers for Sale	Short Cite
Doubleclick	At least as early as 2006	Google, Inc.	Doubleclick
TACODA	At least as early as 2006	TACODA Systems, Inc.	TACODA

c. Motivations for Combining Prior Art

Defendants incorporate by reference the reservation of rights, legal standard, and motivation to combine set forth in Section III.A.3.b, *supra*, as though fully set forth herein.

The '822 patent is invalid in view of the combinations of references disclosed above. A person having ordinary skill in the art at the effective filing date of the '822 patent would have naturally consulted each of these references and combined the teachings, for at least the reasons provided below. Accordingly, a POSITA would have been motivated to combine elements of the references identified above, recognizing that the combination would be a predictable use of

elements known in the art to solve known problems by using known techniques, resulting in expected outcomes. Defendants' expert(s) may further explain the motivation to combine prior art and why the asserted claims of the asserted patents are invalid as obvious in accordance with the case schedule. Nothing herein is intended to limit or preclude such future expert opinion.

A POSITA would have understood the references listed above, alone or in combination, to contain explicit and/or implicit teaching, suggestion, and/or rationales to combine them for at least the following exemplary reasons.¹⁰

Group A: "Targeted Advertisement/Content Delivery Art"

Claims 35-51 of the '822 patent recite limitations relating to targeted advertisement/content delivery to a visitor of a media property, and the references identified below that disclose and/or suggest the obviousness of the claimed subject matter are grouped as "Targeted Advertisement/Content Delivery Art" references for the purposes of these contentions and the disclosure of obviousness combinations.

Nothing about the claimed subject matter adds anything novel or non-obvious over the prior art. To the contrary, the claimed subject matter was well-known, routine, conventional, and widely available long before the alleged invention, as reflected in the disclosures of references cited in the claim charts submitted herewith that Defendant may rely upon. The implementation and use of the claimed subject matter also would have been obvious to a person of ordinary skill

¹⁰ In *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398 (2007), the Supreme Court held that prior art need not disclose the precise teachings of a patented invention to render it obvious, because a court "can take account of the inferences and creative steps that a person of ordinary skill in the art would employ." *Id.* at 418. Under *KSR*, an explanation for why a combination of prior art items renders a claim obvious may be found in the "interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art." *Id.* at 418.

in the art least because doing so would have involved the combination of prior art elements according to known methods to yield predictable results, the simple substitution of one known element for another to obtain predictable results, the application of a known technique to a known device ready for improvement to yield predictable results, and/or would have been obvious to try. A person of ordinary skill in the art would have readily appreciated the well-known and widespread use of this subject matter and the associated benefits and advantages of their use. Moreover, references from the time of the purported invention of the patent in similar and related fields disclosed relevant teachings reflecting motivations to combine, as reflected in the subject matters cited and presented in the claim charts submitted herewith and/or referenced below, which Defendant may rely upon.

- Perry (describing targeted advertisement delivery based on search terms)
- Burdick (describing targeted advertisement delivery based on received user data)
- Bronson (describing targeted content delivery at a second entity based on a resource associated with a first entity)
- McFadden (describing targeted advertisement delivery based on user behavioral data)
- Fernandes (describing delivery of tailored promotions based on stored user data)
- Detering (describing targeted advertisement delivery based on user profile data)
- Beyda (describing targeted content delivery based on audience member profiles)
- Mashinsky (describing targeted advertisement delivery based on consumer profile data)
- Ferber (describing targeted advertisement delivery based on user profile data)
- DoubleClick (describing targeted content delivery based on user behavior)

- TACODA (describing targeted advertisement delivery based on audience behavior)

Group B: “Associated Device Art”:

Claims 35-51 of the '822 patent recite limitations relating to authorizing a second media property to deliver to a user content and/or advertisements associated with information about the user's attributes received from a first media property, where the association is stored in a look-up table structure, and the references identified below that disclose and/or suggest the obviousness of the claimed subject matter are grouped as “Associated Device Art” references for the purposes of these contentions and the disclosure of obviousness combinations.

Nothing about the claimed subject matter adds anything novel or non-obvious over the prior art. To the contrary, the claimed subject matter was well-known, routine, conventional, and widely available long before the alleged invention, as reflected in the disclosures of references cited in the claim charts submitted herewith that Defendant may rely upon. The implementation and use of the claimed subject matter also would have been obvious to a person of ordinary skill in the art least because doing so would have involved the combination of prior art elements according to known methods to yield predictable results, the simple substitution of one known element for another to obtain predictable results, the application of a known technique to a known device ready for improvement to yield predictable results, and/or would have been obvious to try. A person of ordinary skill in the art would have readily appreciated the well-known and widespread use of this subject matter and the associated benefits and advantages of their use. Moreover, references from the time of the purported invention of the patent in similar and related fields disclosed relevant teachings reflecting motivations to combine, as reflected in the subject matters cited and presented in the claim charts submitted herewith and/or referenced below, which Defendant may rely upon.

- Perry (describing storing search terms in a database for later use for targeted advertisement delivery)
- Burdick (describing audience data brokers storing user data within an architecture for targeted advertisement delivery)
- Bronson (describing storing search terms and other information in databases for later use for targeted advertisement delivery)
- McFadden (describing tracking user behavioral data in a database for later use for targeted advertisement delivery)
- Fernandes (describing storing consumer information in a database for later use for targeted advertisement delivery)
- Detering (describing storing information related to user behavior in a database for later use for targeted advertisement delivery)
- Beyda (describing organizing member segments describing user information in a hierarchical structure used for targeted content delivery)
- Mashinsky (describing web matching databases to store user information for targeted advertisement delivery)
- Ferber (describing using lookup tables to store user information for targeted advertisement delivery)
- DoubleClick (describing storing audience segment information in servers and distributed architectures for use in targeted advertisement delivery)
- TACODA (describing storing audience data in data centers for use for targeted advertisement delivery)

Group C: “Conditional Advertisement Art”

Claims 35-51 of the '822 patent recite limitations relating to authorizing display of content and/or an advertisement subject to a condition being met, and the references identified below that disclose and/or suggest the obviousness of the claimed subject matter are grouped as “Conditional Advertisement Art” references for the purposes of these contentions and the disclosure of obviousness combinations.

Nothing about the claimed subject matter adds anything novel or non-obvious over the prior art. To the contrary, the claimed subject matter was well-known, routine, conventional, and widely available long before the alleged invention, as reflected in the disclosures of references cited in the claim charts submitted herewith that Defendant may rely upon. The implementation and use of the claimed subject matter also would have been obvious to a person of ordinary skill in the art least because doing so would have involved the combination of prior art elements according to known methods to yield predictable results, the simple substitution of one known element for another to obtain predictable results, the application of a known technique to a known device ready for improvement to yield predictable results, and/or would have been obvious to try. A person of ordinary skill in the art would have readily appreciated the well-known and widespread use of this subject matter and the associated benefits and advantages of their use. Moreover, references from the time of the purported invention of the patent in similar and related fields disclosed relevant teachings reflecting motivations to combine, as reflected in the subject matters cited and presented in the claim charts submitted herewith and/or referenced below, which Defendant may rely upon.

- Burdick (describing authorizing display of an advertisement subject to bid-related conditions being met)

- Bronson (describing authorizing display of an advertisement subject to various conditions being met)
- Detering (describing authorizing display of an advertisement subject to bid-related and other criteria being met)
- Beyda (describing authorizing display of an advertisement based on complex member segments of user information defined and configured by advertisers)
- Mashinsky (describing authorizing display of an advertisement optimized based on specified user criteria)
- Ferber (describing authorizing display of an advertisement optimized based on ad-attribute profiles)
- DoubleClick (describing authorizing display of an advertisement using an array of target criteria)
- TACODA (describing authorizing display of an advertisement targeting only desired audience segments)

Group D: “Authorizing Redirect Art”

Claims 35-51 of the '822 patent recite limitations relating to, in response to a redirect of a user, authorizing display of content and/or an advertisement by placing a tag, and the references identified below that disclose and/or suggest the obviousness of the claimed subject matter are grouped as “Authorizing Redirect Art” references for the purposes of these contentions and the disclosure of obviousness combinations.

Nothing about the claimed subject matter adds anything novel or non-obvious over the prior art. To the contrary, the claimed subject matter was well-known, routine, conventional, and widely available long before the alleged invention, as reflected in the disclosures of references

cited in the claim charts submitted herewith that Defendant may rely upon. The implementation and use of the claimed subject matter also would have been obvious to a person of ordinary skill in the art least because doing so would have involved the combination of prior art elements according to known methods to yield predictable results, the simple substitution of one known element for another to obtain predictable results, the application of a known technique to a known device ready for improvement to yield predictable results, and/or would have been obvious to try. A person of ordinary skill in the art would have readily appreciated the well-known and widespread use of this subject matter and the associated benefits and advantages of their use. Moreover, references from the time of the purported invention of the patent in similar and related fields disclosed relevant teachings reflecting motivations to combine, as reflected in the subject matters cited and presented in the claim charts submitted herewith and/or referenced below, which Defendant may rely upon.

- Perry (describing redirecting a user that interacts with an advertisement and placing a cookie on a user device)
- Burdick (describing an audience data broker redirecting a user to an exchange which places a tag involved in targeted advertisement delivery)
- McFadden (describing using a client-side program to collect user behavioral data for targeted advertisement delivery as a result of the user visiting a website)
- Fernandes (describing a website placing a cookie to track user preference information for delivery of tailored promotions as a result of the user visiting a website)
- Detering (describing placing a cookie to collect user behavioral data for targeted advertisement delivery and redirecting a user to an alternative advertising service)

- Beyda (describing redirecting a user and placing a cookie to collect user profile information)
- Petrovic (describing redirecting a user along with a session token including information related to user activity)
- Mashinsky (describing placing tags to track user interactions for targeted advertisement delivery)
- Howard (describing placing cookies to collect user data for user authentication)
- DoubleClick (describing a website placing a cookie to track user browsing information and redirecting users to a third-party ad servers)
- TACODA (describing placing cookies to collect user browsing data for targeted advertisement delivery)

Group E: “Ad Authorization Art”

Claims 35-51 of the '822 patent recite limitations relating to a second media property having control over space for delivering content and/or advertisement in a medium different from the medium of the first media property, and the references identified below that disclose and/or suggest the obviousness of the claimed subject matter are grouped as “Ad Authorization Art” references for the purposes of these contentions and the disclosure of obviousness combinations.

Nothing about the claimed subject matter adds anything novel or non-obvious over the prior art. To the contrary, the claimed subject matter was well-known, routine, conventional, and widely available long before the alleged invention, as reflected in the disclosures of references cited in the claim charts submitted herewith that Defendant may rely upon. The implementation and use of the claimed subject matter also would have been obvious to a person of ordinary skill in the art least because doing so would have involved the combination of prior art elements

according to known methods to yield predictable results, the simple substitution of one known element for another to obtain predictable results, the application of a known technique to a known device ready for improvement to yield predictable results, and/or would have been obvious to try. A person of ordinary skill in the art would have readily appreciated the well-known and widespread use of this subject matter and the associated benefits and advantages of their use. Moreover, references from the time of the purported invention of the patent in similar and related fields disclosed relevant teachings reflecting motivations to combine, as reflected in the subject matters cited and presented in the claim charts submitted herewith and/or referenced below, which Defendant may rely upon.

- Detering (describing advertising messages being delivered through various forms of media)
- Beyda (describing a targeting engine program delivering targeted content related to information associated with various forms of media)
- Mashinsky (describing delivery of targeted advertisements across a variety of mediums)
- DoubleClick (describing serving advertisements on web pages, wireless networks, kiosks, games, voice applications, digital TV and emerging digital platforms)

Group F: “Incorporated Condition Redirect Art”

Claims 35-51 of the '822 patent recite limitations relating to incorporating a condition to which a certain user activity is subject into a URL used to redirect a user, and the references identified below that disclose and/or suggest the obviousness of the claimed subject matter are grouped as “Incorporated Condition Redirect Art” references for the purposes of these contentions and the disclosure of obviousness combinations.

Nothing about the claimed subject matter adds anything novel or non-obvious over the prior art. To the contrary, the claimed subject matter was well-known, routine, conventional, and widely available long before the alleged invention, as reflected in the disclosures of references cited in the claim charts submitted herewith that Defendant may rely upon. The implementation and use of the claimed subject matter also would have been obvious to a person of ordinary skill in the art least because doing so would have involved the combination of prior art elements according to known methods to yield predictable results, the simple substitution of one known element for another to obtain predictable results, the application of a known technique to a known device ready for improvement to yield predictable results, and/or would have been obvious to try. A person of ordinary skill in the art would have readily appreciated the well-known and widespread use of this subject matter and the associated benefits and advantages of their use. Moreover, references from the time of the purported invention of the patent in similar and related fields disclosed relevant teachings reflecting motivations to combine, as reflected in the subject matters cited and presented in the claim charts submitted herewith and/or referenced below, which Defendant may rely upon.

- Burdick (describing a publisher broker passing a maximum amount an advertiser will pay by encoding it in a URL)
- Petrovic (describing transmitting a session token within a static URL)

Group A relates to targeted advertisement/content delivery to a visitor of a media property. Any reference in Group A can be combined with any other reference in Group A at least because a person of ordinary skill in the art (POSITA) would have known that substituting elements of one reference would have been a simple substitution of one known element for another to obtain predictable results, or the use of a known technique to improve similar devices (methods, or

products) in the same way, or applying a known technique to a known device (method, or product) ready for improvement to yield predictable results, or simply combining prior art elements according to known methods to yield predictable results. For example, while Perry discloses serving advertisements based on associated user information it does not expressly disclose a condition to which serving an advertisement is subject. However, Bronson expressly discloses a condition to which serving an advertisement is subject being that an amount to be paid exceeds the expected return for an ad system. One of ordinary skill in the art would have been motivated to combine Perry with Bronson, given that because both relate to content targeted to a visitor of a media property and it would have been obvious for a POSITA to try conditioning delivery of an advertisement on a maximum price an advertiser would be willing to pay so as to provide a cost dependent bidding means for advertising.

Group B relates to authorizing a second media property to deliver to a user content and/or advertisements associated with information about the user's attributes received from a first media property, where the association is stored in a look-up table structure. Any reference in Group B can be combined with any other reference in Group B at least because a POSITA would have known that substituting elements of one reference would have been a simple substitution of one known element for another to obtain predictable results or the use of a known technique to improve similar devices (methods, or products) in the same way, or applying a known technique to a known device (method, or product) ready for improvement to yield predictable results, or simply combining prior art elements according to known methods to yield predictable results. For example, while Fernandes discloses a using consumer information for targeted advertisement delivery it does not expressly disclose using search terms entered into a search engine for targeted advertisement delivery. However, Perry expressly discloses using search terms entered into a

search engine for targeted advertisement delivery. One of ordinary skill in the art would have been motivated to combine Fernandes with Perry, given that both relate to using databases storing user information for targeted content delivery, and a POSITA would have known that the various features of each could be interchanged with the other as a simple substitution of consumer information for a search term entered by a user in a search engine would lead to predictable results.

Group C relates to authorizing display of content and/or an advertisement subject to a condition being met. Any reference in Group C can be combined with any other reference in Group C at least because a POSITA would have known that substituting elements of one reference would have been a simple substitution of one known element for another to obtain predictable results or the use of a known technique to improve similar devices (methods, or products) in the same way, or applying a known technique to a known device (method, or product) ready for improvement to yield predictable results, or simply combining prior art elements according to known methods to yield predictable results. For example, while Beyda discloses delivering an advertisement based on complex member segments defined by particular criteria configured by an advertiser, it does not disclose delivering an advertisement based on a maximum price an advertiser would be willing to pay. However, Bronson expressly discloses serving an advertisement subject to an amount an advertiser is willing to pay. Beyda can be combined with Bronson because both relate to delivering content based on a condition and it would have been obvious for a POSITA to try conditioning delivery of an advertisement on a maximum price an advertiser would be willing to pay.

Group D relates to, in response to a redirect of a user, authorizing display of content and/or an advertisement by placing a tag. Any reference in Group D can be combined with any other reference in Group D at least because a POSITA would have known that substituting elements of one reference would have been a simple substitution of one known element for another to obtain

predictable results or the use of a known technique to improve similar devices (methods, or products) in the same way, or applying a known technique to a known device (method, or product) ready for improvement to yield predictable results, or simply combining prior art elements according to known methods to yield predictable results. For example, while Petrovic discloses redirecting a user along with a session token including information related to user activity, it does not disclose redirecting a user along with behavioral data collected as a result of interaction with an advertisement. However, Perry expressly discloses redirecting a user along with behavioral data collected as a result of interaction with an advertisement. Petrovic can be combined with Perry because both relate to redirecting a user along with information related to certain user activity and it would have been obvious for a POSITA to try redirecting a user along with behavioral data collected as a result of interaction with an advertisement.

Group E relates to a second media property having control over space for delivering content and/or advertisement in a medium different from the medium of the first media property. Any reference in Group E can be combined with any other reference in Group E at least because a POSITA would have known that substituting elements of one reference would have been a simple substitution of one known element for another to obtain predictable results or the use of a known technique to improve similar devices (methods, or products) in the same way, or applying a known technique to a known device (method, or product) ready for improvement to yield predictable results, or simply combining prior art elements according to known methods to yield predictable results. For example, while Detering discloses targeting delivery of advertisements based on user behavioral data, it does not disclose using search terms entered by a user for targeted advertisement delivery. However, Beyda expressly discloses collecting information about a user's web searches for use in targeted advertisement delivery. Detering can be combined with Beyda because both

relate to delivering content across various forms of media and a POSITA would have known that simple substitution of behavioral data for information related to a user's web searches would lead to predictable results.

Group F relates to incorporating a condition to which a certain user activity is subject into a URL used to redirect a user. Any reference in Group F can be combined with any other reference in Group F at least because a POSITA would have known that substituting elements of one reference would have been a simple substitution of one known element for another to obtain predictable results or the use of a known technique to improve similar devices (methods, or products) in the same way, or applying a known technique to a known device (method, or product) ready for improvement to yield predictable results, or simply combining prior art elements according to known methods to yield predictable results. For example, while Petrovic discloses redirecting a user along with a session token including information related to user activity, it does not disclose redirecting a user along with a maximum bid for delivery of a targeted advertisement. However, Burdick discloses redirecting a user along with a maximum bid for delivery of a targeted advertisement. Petrovic can be combined with Burdick because both relate to incorporating a condition to which a certain user activity is subject into a URL used to redirect a user and it would have been obvious for a POSITA to try redirecting a user along with user data collected as a result of interaction with an advertisement.

Further, any reference in Group A could have been combined with any reference in Group B, C, D, E and/or Group F because they were within the same field of technology, and a POSITA would have understood that one would have been motivated to combine a reference from Group A with a reference from any other Group because these were related systems intended to work with one another as part of a larger advertising system, and swapping or adding such elements and

features as were available in any of Groups B-F would have been the mere use of known techniques to improve similar devices or systems in the same way, with no more than predictable results. For example, one of ordinary skill in the art would have been motivated to combine references in Group A with references in Group B to provide for delivery of advertising to another device, while combination with Group C would have provided the additional benefit of being able to condition display of an advertisement so as to best target the advertising, whether at one media property or another. One of ordinary skill in the art would have recognized that the ability to authorize display of a content or advertising would improve the ability for control over such advertising, One of ordinary skill in the art would also have recognized that the Group E references could also be combined with any of Group A, B, C, or D references in order to provide specifically for control over a media property for the limited purpose of advertising. And any of Group A, B, C, D, or E references could have been combined with Group F references as a means of taking user activity and translating it into trackable information. One of ordinary skill in the art would have recognized these various sorts of combinations at least as the application of known techniques to known devices (methods, or products) ready for improvement to yield predictable results.

4. INVALIDITY UNDER § 112

The Asserted Claims are invalid under 35 U.S.C. § 112. Defendants incorporate by reference the discussion contained in Section 0 set forth above, as similarly applying to the '822 patent.

At least the following claims of the '822 patent, and all claims depending on these claims, are invalid for failing to meet the requirements of 35 U.S.C. § 112:

Claim Element	Patent (Claims)	§ 112 Grounds
“multitude/for each of a multitude”	35	Indefinite pursuant to pre-AIA § 112, para. 2 Lack of written description pursuant to pre-AIA § 112, para. 1 Lack of enablement pursuant to pre-AIA § 112, para. 1
“possibly applicable to the visitor”	35	Indefinite pursuant to pre-AIA § 112, para. 2 Lack of written description pursuant to pre-AIA § 112, para. 1 Lack of enablement pursuant to pre-AIA § 112, para. 1
“possible profile attributes”	35-37	Indefinite pursuant to pre-AIA § 112, para. 2 Lack of written description pursuant to pre-AIA § 112, para. 1 Lack of enablement pursuant to pre-AIA § 112, para. 1 2
“equipment controlling ad space only temporarily”	46	Indefinite pursuant to pre-AIA § 112, para. 2 Lack of written description pursuant to pre-AIA § 112, para. 1 Lack of enablement pursuant to pre-AIA § 112, para. 1
“third-party”	35	Indefinite pursuant to pre-AIA § 112, para. 2 Lack of written description pursuant to pre-AIA § 112, para. 1 Lack of enablement pursuant to pre-AIA § 112, para. 1
“profile-attribute dependent price”	35	Indefinite pursuant to pre-AIA § 112, para. 2 Lack of written description pursuant to pre-AIA § 112, para. 1 Lack of enablement pursuant to pre-AIA § 112, para. 1
“visitor-specific condition”	35	Indefinite pursuant to pre-AIA § 112, para. 2 Lack of written description pursuant to pre-AIA § 112, para. 1 Lack of enablement pursuant to pre-AIA § 112, para. 1

Claim Element	Patent (Claims)	§ 112 Grounds
“authorizing”	35-44, 47	Indefinite pursuant to pre-AIA § 112, para. 2 Lack of written description pursuant to pre-AIA § 112, para. 1 Lack of enablement pursuant to pre-AIA § 112, para. 1
“arranging for”	37, 44, 47, 49, 50	Indefinite pursuant to pre-AIA § 112, para. 2 Lack of written description pursuant to pre-AIA § 112, para. 1 Lack of enablement pursuant to pre-AIA § 112, para. 1

5. INVALIDITY UNDER § 101

The asserted claims of the '822 patent do not comply with the requirements of 35 U.S.C. § 101. Defendants incorporate by reference the legal discussion contained in Section III.A.5 set forth above.

Alice Step One: The asserted claims of the '822 patent are directed to an abstract idea, for example the abstract idea of authorizing a third party to later display an ad related to an attribute of a visitor in response to earlier receiving information about the attribute of a visitor, if the advertisement price is lower than what the advertiser is willing to pay for advertisements targeting such attribute. *See* '822 patent at claim 1. Each of the independent claims comprises essentially the same basic steps: (1) receiving information about a user, (2) authorizing another party to display an advertisement if an advertiser is willing to pay to show the advertisement based on the received information about the user. *See, e.g.,* '822 patent at claim 35. But the claims disclose no specific technological solution for doing so, instead leaving the POSITA to achieve the claimed results using existing or yet-to-be-invented technology.

The asserted dependent claims are also directed to the same abstract idea of authorizing a third party to later display an ad related to an attribute of a visitor in response to earlier receiving

information about the attribute of a visitor, if the advertisement price is lower than what the advertiser is willing to pay for advertisements targeting such attribute. Thus, all asserted claims of the '822 patent are directed to an abstract idea.

As the Federal Circuit has explained, “An abstract idea can generally be described at different levels of abstraction.” *Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1240 (Fed. Cir. 2016). The abstract ideas offered herein are exemplary, and additional abstract ideas at different levels of abstract may be appropriate. This case is still in its early stages; Defendants reserve the right to provide supplemental contentions in view of information or documents received from Plaintiffs or third parties or that Defendants locate from ongoing investigation, or in response to determinations by this Court. Defendants reserve the right to adopt additional or different descriptions of the abstract idea to which the Asserted Claims are directed, including, without limitation, abstract ideas as identified by other Defendants in any prior or pending court action or proceeding, including but not limited to, the Prior and Pending Actions, which Defendants incorporate by reference herein.

Alice Step Two: The asserted claims of the '822 patent do not recite an inventive concept sufficient to transform their subject matter into something more than the abstract idea. Each and every limitation of the '822 patent claims was well-understood, routine, and conventional as of the priority dates of the '822 patent, as demonstrated by the references provided in Sections III.B.2 and III.B.2.b and described in detail above. The '822 patent claim nothing more than this idea, rather than any specific inventive application of this idea. *See Affinity Labs*, 838 F.3d at 1262. There are no “additional features” in the claims that account for more than “well-understood, routine, conventional activity.” *See id.*

As such, similar to *Affinity Labs*, where the Court found the claims ineligible under § 101, the claims and the shared specification do not contain an “inventive concept that transforms the abstract idea” of authorizing a third party to later display an ad related to an attribute of a visitor in response to earlier receiving information about the attribute of a visitor, if the advertisement price is lower than what the advertiser is willing to pay for advertisements targeting such attribute “into a patent-eligible application of that abstract idea.” See *Affinity Labs*, 838 F.3d at 1262. The asserted claims of the ’822 patent recite only generic components and/or insignificant post-solution activity, without any specific technical solution or improvement to existing technologies to implement the underlying idea, and thus add nothing inventive to the claims. This is insufficient to transform the claimed abstract idea into patent-eligible subject matter. See, e.g., *Alice*, 573 U.S. at 225-26 (holding that “implement[ing] the abstract idea . . . on a generic computer” was not sufficient “to transform an abstract idea into a patent-eligible invention”); *Intellectual Ventures I*, 850 F.3d at 1341-42 (holding that “using generic computer components and conventional computer data processing activities” was not sufficient to find an “inventive concept”); *In re TLI Commc’ns LLC Pat. Litig.*, 823 F.3d at 614 (“[G]eneric computer components [are] insufficient to add an inventive concept to an otherwise abstract idea.”); *Two-Way Media*, 874 F.3d at 1339 (“Nothing in the claims or their constructions. . . . requires anything other than conventional computer and network components operating according to their ordinary functions.”). The dependent claims merely narrow the abstract idea, and thus also add nothing inventive. See *Content Extraction & Transmission LLC*, 776 F.3d at 1349 (dependent claims of narrower scope and using conventional techniques are non-inventive). Therefore, the asserted claims of the ’822 patent are ineligible under § 101.

As mentioned, each and every limitation of the asserted '822 patent claims was well-understood, routine, and conventional as of the priority dates of the '822 patent. For example, without limitation, the following limitations and/or concepts were well-understood, routine, and conventional—both as individual concepts and in an ordered combination in the claim—as of the priority dates of the '822 patent:

- electronic advertisements
- computer programmed to implement a method of directing electronic advertisements
- media property
- electronic visitors to a first media property
- profile attributes possibly applicable to the visitor
- responsive to receiving information about at least one of a plurality of profile attributes possibly applicable to the visitor
- for each of a multitude of different electronic visitors to a first media property, responsive to receiving information about at least one of a plurality of profile attributes possibly applicable to the visitor
- third-party second media property
- automatically electronically authorizing a third-party second media property to allow display
- display of an advertisement correlated with the profile-attribute information received about the visitor
- display to the electronic visitor when the visitor visits the second media property at a time after the visitor visits the first media property

- visitor-specific condition for display
- profile-attribute-dependent price
- being subject to a visitor-specific condition for display of the advertisement that a price charged by the second media property is less than a profile-attribute-dependent price that an advertiser is willing to pay for display of the advertisement
- look-up data structure
- profile attributes
- building a look-up data structure associating at least one selected of a plurality of possible profile attributes with at least one selected of a plurality of second media properties
- wherein the method comprises authorizing those selected second media properties on the lookup data structure associated with the profile-attribute information received about the visitor
- building a look-up data structure associating at least one selected of a plurality of possible profile attributes with at least one selected of a plurality of second media properties
- electronic redirect
- receiving an electronic redirect of a visitor computer
- responsive to receiving an electronic redirect of a visitor computer accompanied by profile-attribute information about the visitor,
- authorizing said at least one selected second media property on the lookup data structure associated with the profile-attribute information received about the visitor, only during a specified time period after receiving profile-attribute information about the visitor

- arranging for placement of a tag readable by said at least one selected second media property
- authorizing responsive to receiving an electronic redirect of a visitor computer accompanied by profile-attribute information about the visitor
- recognizing an action conducted on the first media property by the visitor
- authorizing responsive to receiving information comprises recognizing an action conducted on the first media property by the visitor
- receiving a search request
- authorizing responsive to receiving profile-attribute information comprises authorizing responsive to receiving a search request by the visitor to the first media property
- authorizing responsive to receiving profile-attribute information comprises authorizing responsive to receiving information about a characteristic of the visitor
- categorizing the profile attribute within at least one of a plurality of predefined categories
- authorizing responsive to receiving profile-attribute information comprises authorizing responsive to receiving information about a profile attribute of the visitor and categorizing the profile attribute within at least one of a plurality of predefined categories
- placing a tag on the electronic visitor
- authorizing comprises placing a tag on the electronic visitor, wherein the electronic visitor is a computer, and wherein the tag is readable by the second media property
- authorizing display of the advertisement by arranging for placement of a tag readable by the second media property

- responsive to receiving an electronic redirect of a visitor computer accompanied by profile-attribute information about the visitor, authorizing display of the advertisement by arranging for placement of a tag readable by the second media property
- authorizing display of the advertisement only during a specified time period after receiving profile-attribute information about the visitor
- the second media property comprises media-property equipment controlling ad space that is in a different medium than the medium of the first media property
- the second media property comprises equipment controlling ad space only temporarily
- authorizing responsive to receiving profile-attribute information comprises arranging for placement of a tag associated with the electronic visitor by the third party second media property
- the condition is a specified time period after receiving profile-attribute information about the visitor
- arranging for placement of a tag comprises redirecting the electronic visitor to the second media property for the second media property to place a tag on the electronic visitor readable by the second media property
- the condition is given to the second media property at the time arranging for placement of a tag takes place
- URL used to redirect the electronic visitor to the second media property

- the condition is given by incorporating it in a URL used to redirect the electronic visitor to the second media property to enable the second media property to place a tag associated with the visitor's computer

Defendants further reserve their right to submit and rely upon expert testimony in support of its arguments regarding patent ineligibility.

C. THE '398 PATENT

1. IDENTIFICATION OF INVALIDITY GROUNDS

Based on the reasons identified herein and the accompanying charts and references, a person having ordinary skill in the art would have found the Asserted Claims of the '398 patent invalid under 35 U.S.C. §§ 102 and/or 103. The '398 patent invalidity charts attached as Exhibits C1-C17 set forth herein, for corresponding limitations of an asserted claim, exemplary disclosures from each identified reference in an invalidity ground below where applicable. Defendants reserve the right to amend their invalidity grounds or charts, or provide supplemental grounds or charts, based on any amendments to Plaintiff's infringement contentions, or information or documents that may be obtained as discovery begins including third party discovery.

Defendants provide the following identification of exemplary invalidity grounds for the currently Asserted Claims of the '398 patent:

Claim No.	Exemplary Invalidity Grounds^{11, 12} under 35 U.S.C. §§ 102 and/or 103¹³
1	Martinez in view of Honma and Morimoto

¹¹ For brevity, each reference in this table is identified by its short cite, which is defined later in subsections III.B.2 and III.B.2.b below.

¹² To the extent the grounds identified in the below table for a particular asserted claim refer back to the grounds identified for another claim, the grounds disclose the particular asserted claim for the reasons identified in the corresponding claim charts for the particular asserted claim.

¹³ Defendants contend that any combination of references identified in this table as a ground invalidates the relevant asserted claim under 35 U.S.C. § 103. In addition, each reference identified by itself as a ground invalidates the relevant asserted claim under 35 U.S.C. § 102 and

Claim No.	Exemplary Invalidity Grounds^{11, 12} under 35 U.S.C. §§ 102 and/or 103¹³
2	Martinez in view of Morimoto

2. IDENTIFICATION OF INVALIDITY DUE TO ANTICIPATION

The table below lists the prior art references that anticipate one or more of the Asserted Claims of the '398 patent under 35 U.S.C. § 102. The attached claim charts in Exhibits C1-C17 demonstrate where each limitation of the Asserted Claims is found in the references listed below, either expressly or inherently in the larger context of the passage, as understood by a person having ordinary skill in the art. The following references are prior art under at least 35 U.S.C. §§ 102(a), (b), or (e).

a. Prior Art Patents and Patent Publications That Anticipate the Asserted Claims of the '398 Patent

Patent or Patent Publication No.	Filing Date / Priority Date	Date of Issue or Publication	Short Cite
US2008082413	Oct. 3, 2006	Apr. 3, 2008	Madhavan
US2008120178	Nov. 22, 2006	May 22, 2008	Martinez
US20060195441	Jan. 3, 2006	Nov. 4, 2014	Julia
JP2007053639	Aug. 18, 2005	Mar. 1, 2007	Honma
US7805740B2	Nov. 9, 2007	Sep. 28, 2010	Gilboa
US7900229	Oct. 15, 2002	Mar. 1, 2011	Dureau
US20020059094	Jun. , 2001	May 16, 2002	Hosea
US7962603	Jun. 6, 2000	Jun. 14, 2011	Morimoto
US20070030824	Aug. 8, 2006	Feb. 8, 2007	Ribauda
US8352980	Feb. 15, 2007	Jan. 8, 2013	Howcraft
US7376714	Apr. 1, 2004	May 20, 2008	Gerken
US20030229893	Apr. 26, 2000	Dec. 11, 2003	Sgaraglino
US7843923	Jan. 8, 2002	Nov. 30, 2010	Baum
US20070157247	Dec. 29, 2005	Jul. 5, 2007	Cordray

103.

b. Prior Art Systems/Services That Anticipate the Asserted Claims of the '398 Patent

System/Service	Relevant Dates	Persons/Entities Involved in Prior Use, Sale, and/or Offers for Sale	Short Cite
DoubleClick	At least as early as 1999	Google, Inc.	DoubleClick
Jambo	At least as early as August 2006	Jambo.com	Jambo

3. IDENTIFICATION OF INVALIDITY DUE TO OBVIOUSNESS

The tables below list prior art references that render one or more of the Asserted Claims of the '398 patent invalid as obvious under 35 U.S.C. § 103, alone or in combination with the knowledge of a person having ordinary skill in the art and/or other prior art. The attached claim charts in Exhibits C1-C17, respectively, demonstrate where each limitation of the Asserted Claims is found in the references listed below, either expressly or inherently in the larger context of the passage, as understood by a person having ordinary skill in the art. The following references are prior art under at least 35 U.S.C. §§ 102(a), (b), or (e).

a. Prior Art Patents and Patent Publications That Render Obvious the Asserted Claims of the '398 Patent

Patent or Patent Publication No.	Filing Date / Priority Date	Date of Issue or Publication	Short Cite
US2008082413	Oct. 3, 2006	Apr. 3, 2008	Madhavan
US2008120178	Nov. 22, 2006	May 22, 2008	Martinez
US20060195441	Jan. 3, 2006	Nov. 4, 2014	Julia
JP2007053639	Aug. 18, 2005	Mar. 1, 2007	Honma
US7805740B2	Nov. 9, 2007	Sep. 28, 2010	Gilboa
US7900229	Oct. 15, 2002	Mar. 1, 2011	Dureau
US20020059094	Jun. , 2001	May 16, 2002	Hosea
US7962603	Jun. 6, 2000	Jun. 14, 2011	Morimoto
US20070030824	Aug. 8, 2006	Feb. 8, 2007	Ribaudo
US8352980	Feb. 15, 2007	Jan. 8, 2013	Howcraft
US7376714	Apr. 1, 2004	May 20, 2008	Gerken
US20030229893	Apr. 26, 2000	Dec. 11, 2003	Sgaraglino
US7843923	Jan. 8, 2002	Nov. 30, 2010	Baum

Patent or Patent Publication No.	Filing Date / Priority Date	Date of Issue or Publication	Short Cite
US20070157247	Dec. 29, 2005	Jul. 5, 2007	Cordray

b. Prior Art Systems/Services That Render Obvious the Asserted Claims of the '398 Patent

System/Service	Relevant Dates	Persons/Entities Involved in Prior Use, Sale, and/or Offers for Sale	Short Cite
DoubleClick	At least as early as 2006	Google, Inc.	DoubleClick
Jambo	At least as early as August 2006	Jambo.com	Jambo

c. Motivations for Combining Prior Art

Defendants incorporate by reference the reservation of rights, legal standard, and motivation to combine set forth in Section III.A.3.b, *supra*, as though fully set forth herein.

The '398 patent is invalid in view of the combinations of references disclosed above. A person having ordinary skill in the art at the effective filing date of the '398 patent would have naturally consulted each of these references and combined the teachings, for at least the reasons provided below. Accordingly, a POSITA would have been motivated to combine elements of the references identified above, recognizing that the combination would be a predictable use of elements known in the art to solve known problems by using known techniques, resulting in expected outcomes. Defendants' expert(s) may further explain the motivation to combine prior art and why the asserted claims of the asserted patents are invalid as obvious in accordance with the case schedule. Nothing herein is intended to limit or preclude such future expert opinion.

A POSITA would have understood the references listed above, alone or in combination, to contain explicit and/or implicit teaching, suggestion, and/or rationales to combine them for at least

the following exemplary reasons.¹⁴

Group A: “Targeted Ad/Content Delivery Art”

Claims 1 and 2 of the ’398 patent recite limitations relating to targeted advertisement/content delivery to a user device, and the references identified below that disclose and/or suggest the obviousness of the claimed subject matter are grouped as “Targeted Ad/Content Delivery Art” references for the purposes of these contentions and the disclosure of obviousness combinations.

Nothing about the claimed subject matter adds anything novel or non-obvious over the prior art. To the contrary, the claimed subject matter was well-known, routine, conventional, and widely available long before the alleged invention, as reflected in the disclosures of references cited in the claim charts submitted herewith that Defendant may rely upon. The implementation and use of the claimed subject matter also would have been obvious to a person of ordinary skill in the art least because doing so would have involved the combination of prior art elements according to known methods to yield predictable results, the simple substitution of one known element for another to obtain predictable results, the application of a known technique to a known device ready for improvement to yield predictable results, and/or would have been obvious to try. A person of ordinary skill in the art would have readily appreciated the well-known and widespread use of this subject matter and the associated benefits and advantages of their use. Moreover,

¹⁴ In *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398 (2007), the Supreme Court held that prior art need not disclose the precise teachings of a patented invention to render it obvious, because a court “can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *Id.* at 418. Under *KSR*, an explanation for why a combination of prior art items renders a claim obvious may be found in the “interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art.” *Id.* at 418.

references from the time of the purported invention of the patent in similar and related fields disclosed relevant teachings reflecting motivations to combine, as reflected in the subject matters cited and presented in the claim charts submitted herewith and/or referenced below, which Defendant may rely upon.

- Martinez (describing targeted media and advertisement delivery to a device)
- Madhavan (describing targeted advertisement delivery to a user/device)
- Gerken (describing targeted advertisement delivery to a specific IP address)
- Hosea (describing targeted content delivery to a user/device)
- Gilboa (describing targeted advertisement delivery based on speech recognition)
- Zeff (describing targeted ad delivery based on a user profile)
- Ribauda (describing targeted content delivery to other users/devices in proximity)
- Jambo (describing targeted content delivery based on proximity and/or common network)
- DoubleClick (describing targeted content delivery based on user behavior)

Group B: “IP and Network Association Art”:

Claims 1 and 2 of the ’398 patent recite limitations relating to identifying and/or associating multiple users and/or devices based on a common local area network or common IP addresses, and the references identified below that disclose and/or suggest the obviousness of the claimed subject matter are grouped as “IP and Network Association Art” references for the purposes of these contentions and the disclosure of obviousness combinations.

Nothing about the claimed subject matter adds anything novel or non-obvious over the prior art. To the contrary, the claimed subject matter was well-known, routine, conventional, and

widely available long before the alleged invention, as reflected in the disclosures of references cited in the claim charts submitted herewith that Defendant may rely upon. The implementation and use of the claimed subject matter also would have been obvious to a person of ordinary skill in the art least because doing so would have involved the combination of prior art elements according to known methods to yield predictable results, the simple substitution of one known element for another to obtain predictable results, the application of a known technique to a known device ready for improvement to yield predictable results, and/or would have been obvious to try. A person of ordinary skill in the art would have readily appreciated the well-known and widespread use of this subject matter and the associated benefits and advantages of their use. Moreover, references from the time of the purported invention of the patent in similar and related fields disclosed relevant teachings reflecting motivations to combine, as reflected in the subject matters cited and presented in the claim charts submitted herewith and/or referenced below, which Defendant may rely upon.

- Honma (describing association of devices by IP addresses)
- Gerken (describing identification and association of devices by IP addresses)
- Morimoto (describing identification and distinguishing of devices by IP addresses and timestamps)
- Ribaudó (describing identification and association of devices by proximity, including those within the same LAN)
- Jambo (describing identification and association of devices by proximity, including those within the same LAN)
- Julia (describing a personal network associating multiple devices)
- DoubleClick (describing identification of users and browsers by cookies which

include IP addresses and timestamps)

Group C: “Sending Content/Ad to a Second Device Art”

Claims 1 and 2 of the '398 patent recite limitations relating to sending content and/or advertisements to a second device, and the references identified below that disclose and/or suggest the obviousness of the claimed subject matter are grouped as “Sending Content/Ad to a Second Device Art” references for the purposes of these contentions and the disclosure of obviousness combinations.

Nothing about the claimed subject matter adds anything novel or non-obvious over the prior art. To the contrary, the claimed subject matter was well-known, routine, conventional, and widely available long before the alleged invention, as reflected in the disclosures of references cited in the claim charts submitted herewith that Defendant may rely upon. The implementation and use of the claimed subject matter also would have been obvious to a person of ordinary skill in the art least because doing so would have involved the combination of prior art elements according to known methods to yield predictable results, the simple substitution of one known element for another to obtain predictable results, the application of a known technique to a known device ready for improvement to yield predictable results, and/or would have been obvious to try. A person of ordinary skill in the art would have readily appreciated the well-known and widespread use of this subject matter and the associated benefits and advantages of their use. Moreover, references from the time of the purported invention of the patent in similar and related fields disclosed relevant teachings reflecting motivations to combine, as reflected in the subject matters cited and presented in the claim charts submitted herewith and/or referenced below, which Defendant may rely upon.

- Martinez (describing sending content and advertisements to collocated devices)
- Madhavan (describing sending advertisements to a second device associated with the user)
- Honma (describing sending a control signal to a second device associated with the user)
- Ribaldo (describing sending content to a second device in proximity of the first device)
- Jambo (describing sending content to a second device in proximity of the first device)

Group A relates to targeted advertisement/content delivery to a user device. Any reference in Group A can be combined with any other reference in Group A at least because a person of ordinary skill in the art (POSITA) would have known that substituting elements of one reference would have been a simple substitution of one known element for another to obtain predictable results, or the use of a known technique to improve similar devices (methods, or products) in the same way, or applying a known technique to a known device (method, or product) ready for improvement to yield predictable results, or simply combining prior art elements according to known methods to yield predictable results. For example, while Martinez discloses a “database of media,” it does not expressly disclose a hardware computer system. However, Honma expressly discloses a hardware server device constituting a control system. Martinez can be combined with Honma because both relate to targeted content to a user device and a POSITA would have known that simple substitution of a “server device” for a “database of media” would lead to predictable results. Similarly, Martinez can be combined with Morimoto because a POSITA would have known that a simple substitution of “co-located” devices in Martinez for “common IP address”

and “common LAN” in Morimoto would lead to predictable results.

Similarly, Group B relates to identifying and/or associating multiple users and/or devices based on a common local area network or common IP addresses. Any reference in Group B can be combined with any other reference in Group B at least because a person of ordinary skill in the art (POSITA) would have known that substituting elements of one reference would have been a simple substitution of one known element for another to obtain predictable results, or the use of a known technique to improve similar devices (methods, or products) in the same way, or applying a known technique to a known device (method, or product) ready for improvement to yield predictable results, or simply combining prior art elements according to known methods to yield predictable results. For example, while Morimoto does not expressly disclose a sending content to a second device connected to a common LAN, Honma expressly discloses sending a control signal to the second device connected to a common LAN. One of ordinary skill in the art would have been motivated to combine Morimoto with Honma because both relate to identifying and/or associating multiple users and/or devices based on a common local area network or common IP addresses and it would have been obvious for a POSITA to try sending content to the second device in the common LAN in Morimoto because of predictable solutions and with a reasonable expectation of success.

Group C relates to sending content and/or advertisements to a second device. Any reference in Group C can be combined with any other reference in Group C at least because a person of ordinary skill in the art (POSITA) would have known that substituting elements of one reference would have been a simple substitution of one known element for another to obtain predictable results, or the use of a known technique to improve similar devices (methods, or products) in the same way, or applying a known technique to a known device (method, or product)

ready for improvement to yield predictable results, or simply combining prior art elements according to known methods to yield predictable results.

Further, any reference in Group A could have been combined with any reference in Group B and/or Group C because they were within the same field of technology, and a POSITA would have understood that one would have been motivated to combine the targeted content of a reference from A with targeting the content to a second device as in a reference from Group C because these were related systems intended to work with one another as part of a larger advertising system. For example, a reference from Group A that discloses a targeted advertising system would be able to benefit from additional targeting information about a user that could be collected by utilizing an association of devices as an identification of multiple inputs for user information, as would be disclosed by Group B references. One of ordinary skill in the art would have further recognized that targeting the user with the user information could be done on any one of several devices identified to be associated with the user, and would have been motivated to combine those references in Groups A and/or B with references in Group C to be able to target users on separate devices. This would have been no more than the simple combination of known elements ready for improvement, and/or the application of known techniques to known devices (methods, or products) ready for improvement to yield predictable results, and it would have been obvious to try to send content or advertisements to a second device connected to the LAN with a reasonable expectation of success.

4. INVALIDITY UNDER § 112

The Asserted Claims are invalid under 35 U.S.C. § 112. Defendants incorporate by reference the discussion contained in Section 0 set forth above, as similarly applying to the '398 patent.

At least the following claims of the '398 patent, and all claims depending on these claims,

are invalid for failing to meet the requirements of 35 U.S.C. § 112:

Claim Element	Patent (Claims)	§ 112 Grounds
“another programmed hardware computer system”	1	Indefinite pursuant to pre-AIA § 112, para. 2 Lack of written description pursuant to pre-AIA § 112, para. 1 Lack of enablement pursuant to pre-AIA § 112, para. 1
“which is indicated”	1	Indefinite pursuant to pre-AIA § 112, para. 2 Lack of written description pursuant to pre-AIA § 112, para. 1 Lack of enablement pursuant to pre-AIA § 112, para. 1
“electronic indicia of [an/the] association”	1	Indefinite pursuant to pre-AIA § 112, para. 2 Lack of written description pursuant to pre-AIA § 112, para. 1 Lack of enablement pursuant to pre-AIA § 112, para. 1

5. INVALIDITY UNDER § 101

The asserted claims of the ’398 patent do not comply with the requirements of 35 U.S.C. § 101. Defendants incorporate by reference the legal discussion contained in Section III.A.5 set forth above.

Alice Step One: The asserted claims of the ’398 patent are directed to an abstract idea, for example the abstract idea of causing an action based on associating two devices as using the same local area network. *See* ’398 patent at claim 1. Each of the independent claims comprises essentially the same basic steps: (1) generating and storing information about a first and a second device being associated as using the same local area network, (2) causing an action with respect to the second device based on profile information of the first device. *See, e.g.,* ’398 patent at claim 1. But the claims disclose no specific technological solution for doing so, instead leaving the POSITA to achieve the claimed results using existing or yet-to-be-invented technology.

The asserted dependent claims are also directed to the same abstract idea of causing an action based on associating two devices as using the same local area network. Thus, all asserted claims of the '398 patent are directed to an abstract idea.

As the Federal Circuit has explained, “An abstract idea can generally be described at different levels of abstraction.” *Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1240 (Fed. Cir. 2016). The abstract ideas offered herein are exemplary, and additional abstract ideas at different levels of abstract may be appropriate. This case is still in its early stages; Defendants reserve the right to provide supplemental contentions in view of information or documents received from Plaintiffs or third parties or that Defendants locate from ongoing investigation, or in response to determinations by this Court. Defendants reserve the right to adopt additional or different descriptions of the abstract idea to which the Asserted Claims are directed, including, without limitation, abstract ideas as identified by other Defendants in any prior or pending court action or proceeding, including but not limited to, the Prior and Pending Actions, which Defendants incorporate by reference herein.

Alice Step Two: The asserted claims of the '398 patent do not recite an inventive concept sufficient to transform their subject matter into something more than the abstract idea. Each and every limitation of the '398 patent claims was well-understood, routine, and conventional as of the priority dates of the '398 patent, as demonstrated by the references provided in Sections III.B.2 and III.B.2.b and described in detail above. The '398 patent claim nothing more than this idea, rather than any specific inventive application of this idea. *See Affinity Labs*, 838 F.3d at 1262. There are no “additional features” in the claims that account for more than “well-understood, routine, conventional activity.” *See id.*

As such, similar to *Affinity Labs*, where the Court found the claims ineligible under § 101, the claims and the shared specification do not contain an “inventive concept that transforms the abstract idea” of causing an action based on associating two devices as using the same local area network “into a patent-eligible application of that abstract idea.” *See Affinity Labs*, 838 F.3d at 1262. The asserted claims of the ’398 patent recite only generic components and/or insignificant post-solution activity, without any specific technical solution or improvement to existing technologies to implement the underlying idea, and thus add nothing inventive to the claims. This is insufficient to transform the claimed abstract idea into patent-eligible subject matter. *See, e.g., Alice*, 573 U.S. at 225-26 (holding that “implement[ing] the abstract idea . . . on a generic computer” was not sufficient “to transform an abstract idea into a patent-eligible invention”); *Intellectual Ventures I*, 850 F.3d at 1341-42 (holding that “using generic computer components and conventional computer data processing activities” was not sufficient to find an “inventive concept”); *In re TLI Commc’ns LLC Pat. Litig.*, 823 F.3d at 614 (“[G]eneric computer components [are] insufficient to add an inventive concept to an otherwise abstract idea.”); *Two-Way Media*, 874 F.3d at 1339 (“Nothing in the claims or their constructions. . . . requires anything other than conventional computer and network components operating according to their ordinary functions.”). The dependent claims merely narrow the abstract idea, and thus also add nothing inventive. *See Content Extraction & Transmission LLC*, 776 F.3d at 1349 (dependent claims of narrower scope and using conventional techniques are non-inventive). Therefore, the asserted claims of the ’398 patent are ineligible under § 101.

As mentioned, each and every limitation of the asserted ’398 patent claims was well-understood, routine, and conventional as of the priority dates of the ’398 patent. For example, without limitation, the following limitations and/or concepts were well-understood, routine, and

conventional—both as individual concepts and in an ordered combination in the claim—as of the priority dates of the '398 patent:

- receiving, at the computer system, an electronic identifier of a first device
- electronic identifier
- electronic indicia
- association between the first device identifier and an electronic identifier of a second device
- automatically generating and storing electronic indicia of an association between the first device identifier and an electronic identifier of a second device based on automatically recognizing that each of the first and second devices was connected, independently of the other, to a common local area network
- local area network
- automatically recognizing that each of the first and second devices was connected, independently of the other, to a common local area network, wherein the computer system is connected to the local area network through the Internet but is not in the local area network
- computer system is connected to the local area network through the Internet but is not in the local area network
- based on the electronic indicia of the association between the first and second device identifiers, automatically sending an electronic transmission that causes another programmed hardware computer system to take an action

- take an action, based on first electronic profile data associated with the first device identifier, with respect to the second device, which is indicated at the time of the action by the second device identifier
- the electronic association is recognized based on a common IP address, or portion thereof
- network traffic is routed via the common IP address for each of the first and second devices when each is connected to the local area network
- electronic association
- electronic association is recognized based on a common IP address, or portion thereof, wherein network traffic is routed via the common IP address for each of the first and second devices when each is connected to the local area network

Defendants further reserve their right to submit and rely upon expert testimony in support of its arguments regarding patent ineligibility.

D. THE '878 PATENT

1. IDENTIFICATION OF INVALIDITY GROUNDS

Based on the reasons identified herein and the accompanying charts and references, a person having ordinary skill in the art would have found the Asserted Claims of the '878 patent invalid under 35 U.S.C. §§ 102 and/or 103. The '878 patent invalidity charts attached as Exhibits D1-D14 set forth herein, for corresponding limitations of an asserted claim, exemplary disclosures from each identified reference in an invalidity ground below where applicable. Defendants reserve the right to amend their invalidity grounds or charts, or provide supplemental grounds or charts, based on any amendments to Plaintiff's infringement contentions, or information or documents that may be obtained as discovery begins including third party discovery.

Defendants provide the following identification of exemplary invalidity grounds for the currently Asserted Claims of the '878 patent:

Claim No.	Exemplary Invalidity Grounds^{15, 16} under 35 U.S.C. §§ 102 and/or 103¹⁷
13	Martinez in view of Morimoto Martinez in view of Gerken and Madhavan Martinez in view of Madhavan and Honma
14	Martinez in view of Ribauda
15	Martinez
16	Martinez
17	Martinez in view of Gilboa Madhavan in view of Gilboa
18	Martinez Gerken
20	Martinez in view of Madhavan

2. IDENTIFICATION OF INVALIDITY DUE TO ANTICIPATION

The table below lists the prior art references that anticipate one or more of the Asserted Claims of the '878 patent under 35 U.S.C. § 102. The attached claim charts in Exhibits D1-D14 demonstrate where each limitation of the Asserted Claims is found in the references listed below, either expressly or inherently in the larger context of the passage, as understood by a person having ordinary skill in the art. The following references are prior art under at least 35 U.S.C. §§ 102(a),

¹⁵ For brevity, each reference in this table is identified by its short cite, which is defined later in subsections III.B.2 and III.B.2.b below.

¹⁶ To the extent the grounds identified in the below table for a particular asserted claim refer back to the grounds identified for another claim, the grounds disclose the particular asserted claim for the reasons identified in the corresponding claim charts for the particular asserted claim.

¹⁷ Defendants contend that any combination of references identified in this table as a ground invalidates the relevant asserted claim under 35 U.S.C. § 103. In addition, each reference identified by itself as a ground invalidates the relevant asserted claim under 35 U.S.C. § 102 and 103.

(b), or (e).

a. Prior Art Patents and Patent Publications That Anticipate the Asserted Claims of the '878 Patent

Patent or Patent Publication No.	Filing Date / Priority Date	Date of Issue or Publication	Short Cite
US2008082413	Oct. 3, 2006	May 15, 2012	Madhavan
JP2007053639	Aug. 18, 2005	Mar. 1, 2007	Honma
US20020059094	Jun. 7, 2001	May 16, 2002	Hosea
US2008120178	Nov. 22, 2006	May 22, 2008	Martinez
US7805740B2	Nov. 9, 2007	Sep. 28, 2010	Gilboa
US7962603	Jun. 6, 2000	Jun. 14, 2011	Morimoto
US20070030824	Aug. 8, 2006	Feb. 8, 2007	Ribaudo
US8352980	Feb. 15, 2007	Jan. 8, 2013	Howcraft
US7376714	Apr. 1, 2004	May 20, 2008	Gerken
US20030229893	Apr. 26, 2000	Dec. 11, 2003	Sgaraglino
US7843923	Jan. 8, 2002	Nov. 30, 2010	Baum
US20070157247	Dec. 29, 2005	Jul. 5, 2007	Cordray

b. Prior Art Systems/Services That Anticipate the Asserted Claims of the '878 Patent

System/Service	Relevant Dates	Persons/Entities Involved in Prior Use, Sale, and/or Offers for Sale	Short Cite
DoubleClick	At least as early as 2006	Google, Inc.	DoubleClick
Jambo	At least as early as August 2006	Jambo.com	Jambo

3. IDENTIFICATION OF INVALIDITY DUE TO OBVIOUSNESS

The tables below list prior art references that render one or more of the Asserted Claims of the '878 patent invalid as obvious under 35 U.S.C. § 103, alone or in combination with the knowledge of a person having ordinary skill in the art and/or other prior art. The attached claim charts in Exhibits D1-D14, respectively, demonstrate where each limitation of the Asserted Claims is found in the references listed below, either expressly or inherently in the larger context of the

passage, as understood by a person having ordinary skill in the art. The following references are prior art under at least 35 U.S.C. §§ 102(a), (b), or (e).

a. Prior Art Patents and Patent Publications That Render Obvious the Asserted Claims of the '878 Patent

Patent or Patent Publication No.	Filing Date / Priority Date	Date of Issue or Publication	Short Cite
US2008082413	Oct. 3, 2006	May 15, 2012	Madhavan
JP2007053639	Aug. 18, 2005	Mar. 1, 2007	Honma
US20020059094	Jun. 7, 2001	May 16, 2002	Hosea
US2008120178	Nov. 22, 2006	May 22, 2008	Martinez
US7900229	Oct. 15, 2002	Mar. 1, 2011	Dureau
US7805740B2	Nov. 9, 2007	Sep. 28, 2010	Gilboa
US7962603	Jun. 6, 2000	Jun. 14, 2011	Morimoto
US20070030824	Aug. 8, 2006	Feb. 8, 2007	Ribaudo
US8352980	Feb. 15, 2007	Jan. 8, 2013	Howcraft
US7376714	Apr. 1, 2004	May 20, 2008	Gerken
US20030229893	Apr. 26, 2000	Dec. 11, 2003	Sgaraglino
US7843923	Jan. 8, 2002	Nov. 30, 2010	Baum
US20070157247	Dec. 29, 2005	Jul. 5, 2007	Cordray

b. Prior Art Systems/Services That Render Obvious the Asserted Claims of the '878 Patent

System/Service	Relevant Dates	Persons/Entities Involved in Prior Use, Sale, and/or Offers for Sale	Short Cite
DoubleClick	At least as early as 2006	Google, Inc.	DoubleClick
Jambo	At least as early as August 2006	Jambo.com	Jambo

c. Motivations for Combining Prior Art

Defendants incorporate by reference the reservation of rights, legal standard, and motivation to combine set forth in Section III.A.3.b, *supra*, as though fully set forth herein.

The '878 patent is invalid in view of the combinations of references disclosed above. A person having ordinary skill in the art at the effective filing date of the '878 patent would have naturally consulted each of these references and combined the teachings, for at least the reasons

provided below. Accordingly, a POSITA would have been motivated to combine elements of the references identified above, recognizing that the combination would be a predictable use of elements known in the art to solve known problems by using known techniques, resulting in expected outcomes. Defendants' expert(s) may further explain the motivation to combine prior art and why the asserted claims of the asserted patents are invalid as obvious in accordance with the case schedule. Nothing herein is intended to limit or preclude such future expert opinion.

A POSITA would have understood the references listed above, alone or in combination, to contain explicit and/or implicit teaching, suggestion, and/or rationales to combine them for at least the following exemplary reasons.¹⁸

Group A: "Targeted Ads/Content Delivery Art"

Claims 13-18 and claim 20 of the '878 patent recite limitations relating to targeted advertisement delivery to a user device, and the references identified below that disclose and/or suggest the obviousness of the claimed subject matter are grouped as "Targeted Ads/Content Delivery Art" references for the purposes of these contentions and the disclosure of obviousness combinations.

Nothing about the claimed subject matter adds anything novel or non-obvious over the prior art. To the contrary, the claimed subject matter was well-known, routine, conventional, and widely available long before the alleged invention, as reflected in the disclosures of references

¹⁸ In *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398 (2007), the Supreme Court held that prior art need not disclose the precise teachings of a patented invention to render it obvious, because a court "can take account of the inferences and creative steps that a person of ordinary skill in the art would employ." *Id.* at 418. Under *KSR*, an explanation for why a combination of prior art items renders a claim obvious may be found in the "interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art." *Id.* at 418.

cited in the claim charts submitted herewith that Defendant may rely upon. The implementation and use of the claimed subject matter also would have been obvious to a person of ordinary skill in the art least because doing so would have involved the combination of prior art elements according to known methods to yield predictable results, the simple substitution of one known element for another to obtain predictable results, the application of a known technique to a known device ready for improvement to yield predictable results, and/or would have been obvious to try. A person of ordinary skill in the art would have readily appreciated the well-known and widespread use of this subject matter and the associated benefits and advantages of their use. Moreover, references from the time of the purported invention of the patent in similar and related fields disclosed relevant teachings reflecting motivations to combine, as reflected in the subject matters cited and presented in the claim charts submitted herewith and/or referenced below, which Defendant may rely upon.

- Martinez (describing targeted media and advertisement delivery to a device)
- Madhavan (describing targeted advertisement delivery to a user/device)
- Gerken (describing targeted advertisement delivery to a specific IP address)
- Hosea (describing targeted content delivery to a user/device)
- Gilboa (describing targeted advertisement delivery based on speech recognition)
- Ribauda (describing targeted content delivery to other users/devices in proximity)
- Jambo (describing targeted content delivery to other users/devices in proximity)

Group B: “IP or Network Association Art”:

Claims 13-18 and claim 20 of the ‘878 patent recite limitations relating to identifying and/or associating multiple users and/or devices based on a common local area network or

common IP addresses, and the references identified below that disclose and/or suggest the obviousness of the claimed subject matter are grouped as “IP or Network Association Art” references for the purposes of these contentions and the disclosure of obviousness combinations.

Nothing about the claimed subject matter adds anything novel or non-obvious over the prior art. To the contrary, the claimed subject matter was well-known, routine, conventional, and widely available long before the alleged invention, as reflected in the disclosures of references cited in the claim charts submitted herewith that Defendant may rely upon. The implementation and use of the claimed subject matter also would have been obvious to a person of ordinary skill in the art least because doing so would have involved the combination of prior art elements according to known methods to yield predictable results, the simple substitution of one known element for another to obtain predictable results, the application of a known technique to a known device ready for improvement to yield predictable results, and/or would have been obvious to try. A person of ordinary skill in the art would have readily appreciated the well-known and widespread use of this subject matter and the associated benefits and advantages of their use. Moreover, references from the time of the purported invention of the patent in similar and related fields disclosed relevant teachings reflecting motivations to combine, as reflected in the subject matters cited and presented in the claim charts submitted herewith and/or referenced below, which Defendant may rely upon.

- Honma (describing association of devices by IP addresses)
- Gerken (describing identification and association of devices by IP addresses)
- Morimoto (describing identification and distinguishing of devices by IP addresses and timestamps)
- Ribaudó (describing identification and association of devices by proximity,

including those within the same LAN)

- Jambo (describing targeted content delivery to other users/devices in proximity)

Group C: Distinguishing the Devices with Dynamic IP Addresses and/or by Timestamp

Claims 13-18 and claim 20 of the '878 patent recite limitations relating to distinguishing the devices with dynamic IP addresses and/or by a timestamp, and the references identified below that disclose and/or suggest the obviousness of the claimed subject matter are grouped as “Distinguishing the Devices with Dynamic IP Addresses and by Timestamp” references for the purposes of these contentions and the disclosure of obviousness combinations.

Nothing about the claimed subject matter adds anything novel or non-obvious over the prior art. To the contrary, the claimed subject matter was well-known, routine, conventional, and widely available long before the alleged invention, as reflected in the disclosures of references cited in the claim charts submitted herewith that Defendant may rely upon. The implementation and use of the claimed subject matter also would have been obvious to a person of ordinary skill in the art least because doing so would have involved the combination of prior art elements according to known methods to yield predictable results, the simple substitution of one known element for another to obtain predictable results, the application of a known technique to a known device ready for improvement to yield predictable results, and/or would have been obvious to try. A person of ordinary skill in the art would have readily appreciated the well-known and widespread use of this subject matter and the associated benefits and advantages of their use. Moreover, references from the time of the purported invention of the patent in similar and related fields disclosed relevant teachings reflecting motivations to combine, as reflected in the subject matters cited and presented in the claim charts submitted herewith and/or referenced below, which Defendant may rely upon.

- Martinez (describing timestamp data for device identification)
- Morimoto (describing dynamic IP addresses and identifying and distinguishing users/devices using timestamp data)
- Honma (describing dynamic IP addresses)

Group D: Utilize Behavioral and Demographic Information from the First Device Including Mobile Devices Intermittently Connected to the LAN

Claims 13-18 and claim 20 of the '878 patent recite limitations relating to utilizing behavioral and demographic information collected by the first device, including a mobile device connected intermittently to the LAN, and the references identified below that disclose and/or suggest the obviousness of the claimed subject matter are grouped as “Utilize Behavioral and Demographic Information from the First Device Including Mobile Devices Intermittently Connected to the LAN” references for the purposes of these contentions and the disclosure of obviousness combinations.

Nothing about the claimed subject matter adds anything novel or non-obvious over the prior art. To the contrary, the claimed subject matter was well-known, routine, conventional, and widely available long before the alleged invention, as reflected in the disclosures of references cited in the claim charts submitted herewith that Defendant may rely upon. The implementation and use of the claimed subject matter also would have been obvious to a person of ordinary skill in the art least because doing so would have involved the combination of prior art elements according to known methods to yield predictable results, the simple substitution of one known element for another to obtain predictable results, the application of a known technique to a known device ready for improvement to yield predictable results, and/or would have been obvious to try. A person of ordinary skill in the art would have readily appreciated the well-known and widespread

use of this subject matter and the associated benefits and advantages of their use. Moreover, references from the time of the purported invention of the patent in similar and related fields disclosed relevant teachings reflecting motivations to combine, as reflected in the subject matters cited and presented in the claim charts submitted herewith and/or referenced below, which Defendant may rely upon.

- Martinez (describing utilizing behavioral and/or demographic data from the first device, including a mobile device connected intermittently to the LAN)
- Madhavan (describing utilizing behavioral and/or demographic data from the first device, including a mobile device)
- Honma (describing utilizing behavioral and/or demographic data from the first device, including a mobile device)
- Ribaud (describing utilizing behavioral and/or demographic data from the first device, including a mobile device)
- Gerken (describing utilizing behavioral and/or demographic data from the first device)
- Gilboa (describing utilizing behavioral and/or demographic data from the first device, including a mobile device)

Group E: Sending Content/Advertisement to a Second Device

Claims 13-18 and claim 20 of the '878 patent recite limitations relating to sending content and/or advertisements to a second device, and the references identified below that disclose and/or suggest the obviousness of the claimed subject matter are grouped as "Sending Content/Advertisement to a Second Device" references for the purposes of these contentions and

the disclosure of obviousness combinations.

Nothing about the claimed subject matter adds anything novel or non-obvious over the prior art. To the contrary, the claimed subject matter was well-known, routine, conventional, and widely available long before the alleged invention, as reflected in the disclosures of references cited in the claim charts submitted herewith that Defendant may rely upon. The implementation and use of the claimed subject matter also would have been obvious to a person of ordinary skill in the art least because doing so would have involved the combination of prior art elements according to known methods to yield predictable results, the simple substitution of one known element for another to obtain predictable results, the application of a known technique to a known device ready for improvement to yield predictable results, and/or would have been obvious to try. A person of ordinary skill in the art would have readily appreciated the well-known and widespread use of this subject matter and the associated benefits and advantages of their use. Moreover, references from the time of the purported invention of the patent in similar and related fields disclosed relevant teachings reflecting motivations to combine, as reflected in the subject matters cited and presented in the claim charts submitted herewith and/or referenced below, which Defendant may rely upon.

- Martinez (describing sending content and advertisements to collocated devices)
- Madhavan (describing sending advertisements to a second device associated with the user)
- Honma (describing sending a control signal to a second device associated with the user)
- Ribaudó (describing sending content to a second device in proximity of the first device)

- Jambo (describing targeted content delivery to other users/devices in proximity)

Group A relates to targeted advertisement/content delivery to a user device. Any reference in Group A can be combined with any other reference in Group A at least because a person of ordinary skill in the art (POSITA) would have known that substituting elements of one reference would have been a simple substitution of one known element for another to obtain predictable results, or the use of a known technique to improve similar devices (methods, or products) in the same way, or applying a known technique to a known device (method, or product) ready for improvement to yield predictable results, or simply combining prior art elements according to known methods to yield predictable results. For example, while Martinez discloses a “database of media,” it does not expressly disclose a computer system. However, Honma expressly discloses a hardware server device constituting a control system. Martinez can be combined with Honma because both relate to targeted content to a user device and a POSITA would have known that simple substitution of a “server device” for a “database of media” would lead to predictable results. Similarly, Martinez can be combined with Morimoto because a POSITA would have known that a simple substitution of “co-located” devices in Martinez for “common IP address” and “common LAN” in Morimoto would lead to predictable results.

Similarly, Group B relates to identifying and/or associating multiple users and/or devices based on a common local area network or common IP addresses. Any reference in Group B can be combined with any other reference in Group B at least because a person of ordinary skill in the art (POSITA) would have known that substituting elements of one reference would have been a simple substitution of one known element for another to obtain predictable results, or the use of a known technique to improve similar devices (methods, or products) in the same way, or applying a known technique to a known device (method, or product) ready for improvement to yield

predictable results, or simply combining prior art elements according to known methods to yield predictable results. For example, while Morimoto does not expressly disclose a sending content to a second device connected to a common LAN, Honma expressly discloses sending a control signal to the second device connected to a common LAN. Morimoto can be combined with Honma because both relate to identifying and/or associating multiple users and/or devices based on a common local area network or common IP addresses and it would have be obvious for a POSITA to try sending content to the second device in the common LAN in Morimoto because of predictable solutions and with a reasonable expectation of success.

Group C relates to distinguishing the devices with dynamic IP addresses and/or by a timestamp. Any reference in Group C can be combined with any other reference in Group C at least because a person of ordinary skill in the art (POSITA) would have known that substituting elements of one reference would have been a simple substitution of one known element for another to obtain predictable results, or the use of a known technique to improve similar devices (methods, or products) in the same way, or applying a known technique to a known device (method, or product) ready for improvement to yield predictable results, or simply combining prior art elements according to known methods to yield predictable results. For example, while Morimoto does not expressly disclose a sending content to a second device connected to a LAN, Honma expressly discloses sending a control signal to the second device connected to a LAN. Morimoto can be combined with Honma because both relate to distinguishing the devices with dynamic IP addresses and/or by a timestamp and it would have be obvious for a POSITA to try sending content to the second device in the common LAN in Morimoto because of predictable solutions and with a reasonable expectation of success.

Group D relates to utilizing behavioral and demographic information collected by the first

device, including a mobile device connected intermittently to the LAN. Any reference in Group C can be combined with any other reference in Group C at least because a person of ordinary skill in the art (POSITA) would have known that substituting elements of one reference would have been a simple substitution of one known element for another to obtain predictable results, or the use of a known technique to improve similar devices (methods, or products) in the same way, or applying a known technique to a known device (method, or product) ready for improvement to yield predictable results, or simply combining prior art elements according to known methods to yield predictable results. For example, while Gerken does not expressly disclose a predetermined time to access the internet through the LAN, Madhavan discloses a predetermined window for internet access. Gerken can be combined with Madhavan because both generally relate to targeted advertisement, and also particularly utilizing behavioral and demographic data in generating a user profile. Thus, it would have been obvious for a POSITA to try a predetermined time for accessing the internet through a router in Gerken because of predictable solutions with a reasonable expectation of success.

Group E relates to sending content and/or advertisements to a second device. Any reference in Group E can be combined with any other reference in Group E at least because a person of ordinary skill in the art (POSITA) would have known that substituting elements of one reference would have been a simple substitution of one known element for another to obtain predictable results, or the use of a known technique to improve similar devices (methods, or products) in the same way, or applying a known technique to a known device (method, or product) ready for improvement to yield predictable results, or simply combining prior art elements according to known methods to yield predictable results.

Further, any reference in Group A could have been combined with any reference in Group

B, C, D and/or Group E because they were within the same field of technology, and a POSITA would have understood that one would have been motivated to combine a reference from A with a reference from any other Group because these were related systems intended to work with one another as part of a larger advertising system, and the features and functions of the references in any of groups B, C, D, and/or E would have been implemented within the system or methods of any reference in Group A as either a simple substitution of one known element for another to obtain predictable results or the combination of prior art elements according to known methods to yield predictable results. For example, a reference from Group A that discloses a targeted advertising system would be able to benefit from additional targeting information about a user that could be collected by utilizing an association of devices as an identification of multiple inputs for user information, as would be disclosed by Group B, C, and D references. Moreover, one of ordinary skill in the art would have recognized that the references of Groups A, B, C, and D would have benefited from the references of Group E so as to provide content and/or advertising to another device, and not merely on the original device itself. One of ordinary skill in the art would have recognized this as no more than the simple combination of known elements ready for improvement, and/or the application of known techniques to known devices (methods, or products) ready for improvement to yield predictable results, and it would have been obvious to try such combinations with a reasonable expectation of success.

4. INVALIDITY UNDER § 112

The Asserted Claims are invalid under 35 U.S.C. § 112. Defendants incorporate by reference the discussion contained in Section 0 set forth above, as similarly applying to the '878 patent.

At least the following claims of the '878 patent, and all claims depending on these claims, are invalid for failing to meet the requirements of 35 U.S.C. § 112:

Claim Element	Patent (Claims)	§ 112 Grounds
“cross-device action”	13	Indefinite pursuant to pre-AIA § 112, para. 2 Lack of written description pursuant to pre-AIA § 112, para. 1 Lack of enablement pursuant to pre-AIA § 112, para. 1
“only intermittently”	14	Indefinite pursuant to pre-AIA § 112, para. 2 Lack of written description pursuant to pre-AIA § 112, para. 1 Lack of enablement pursuant to pre-AIA § 112, para. 1
“selecting an advertisement, from among a plurality of possible advertisements . . .”	17	Indefinite pursuant to pre-AIA § 112, para. 2 Lack of written description pursuant to pre-AIA § 112, para. 1 Lack of enablement pursuant to pre-AIA § 112, para. 1

5. INVALIDITY UNDER § 101

The asserted claims of the ’878 patent do not comply with the requirements of 35 U.S.C. § 101. Defendants incorporate by reference the legal discussion contained in Section III.A.5 set forth above.

Alice Step One: The asserted claims of the ’878 patent are directed to an abstract idea, for example the abstract idea of causing an action on a second device based on user information associated with a first device associated with the second device as using the same LAN. *See* ’878 patent at claim 13. Each of the independent claims comprises essentially the same basic steps: (1) determining an association between two devices that accessed the Internet via a common IP address, (2) taking an action on a second device based on data collected on the first device. *See, e.g.,* ’878 patent at claim 13. But the claims disclose no specific technological solution for doing so, instead leaving the POSITA to achieve the claimed results using existing or yet-to-be-invented technology.

The asserted dependent claims are also directed to the same abstract idea of causing an action on a second device based on user information associated with a first device associated with the second device as using the same LAN. Thus, all asserted claims of the '878 patent are directed to an abstract idea.

As the Federal Circuit has explained, “An abstract idea can generally be described at different levels of abstraction.” *Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1240 (Fed. Cir. 2016). The abstract ideas offered herein are exemplary, and additional abstract ideas at different levels of abstract may be appropriate. This case is still in its early stages; Defendants reserve the right to provide supplemental contentions in view of information or documents received from Plaintiffs or third parties or that Defendants locate from ongoing investigation, or in response to determinations by this Court. Defendants reserve the right to adopt additional or different descriptions of the abstract idea to which the Asserted Claims are directed, including, without limitation, abstract ideas as identified by other Defendants in any prior or pending court action or proceeding, including but not limited to, the Prior and Pending Actions, which Defendants incorporate by reference herein.

Alice Step Two: The asserted claims of the '878 patent do not recite an inventive concept sufficient to transform their subject matter into something more than the abstract idea. Each and every limitation of the '878 patent claims was well-understood, routine, and conventional as of the priority dates of the '878 patent, as demonstrated by the references provided in Sections III.B.2 and III.B.2.b and described in detail above. The '878 patent claim nothing more than this idea, rather than any specific inventive application of this idea. *See Affinity Labs*, 838 F.3d at 1262. There are no “additional features” in the claims that account for more than “well-understood, routine, conventional activity.” *See id.*

As such, similar to *Affinity Labs*, where the Court found the claims ineligible under § 101, the claims and the shared specification do not contain an “inventive concept that transforms the abstract idea” of Defendants further reserve their right to submit and rely upon expert testimony in support of its arguments regarding patent ineligibility “into a patent-eligible application of that abstract idea.” *See Affinity Labs*, 838 F.3d at 1262. The asserted claims of the ’878 patent recite only generic components and/or insignificant post-solution activity, without any specific technical solution or improvement to existing technologies to implement the underlying idea, and thus add nothing inventive to the claims. This is insufficient to transform the claimed abstract idea into patent-eligible subject matter. *See, e.g., Alice*, 573 U.S. at 225-26 (holding that “implement[ing] the abstract idea . . . on a generic computer” was not sufficient “to transform an abstract idea into a patent-eligible invention”); *Intellectual Ventures I*, 850 F.3d at 1341-42 (holding that “using generic computer components and conventional computer data processing activities” was not sufficient to find an “inventive concept”); *In re TLI Commc’ns LLC Pat. Litig.*, 823 F.3d at 614 (“[G]eneric computer components [are] insufficient to add an inventive concept to an otherwise abstract idea.”); *Two-Way Media*, 874 F.3d at 1339 (“Nothing in the claims or their constructions. . . . requires anything other than conventional computer and network components operating according to their ordinary functions.”). The dependent claims merely narrow the abstract idea, and thus also add nothing inventive. *See Content Extraction & Transmission LLC*, 776 F.3d at 1349 (dependent claims of narrower scope and using conventional techniques are non-inventive). Therefore, the asserted claims of the ’878 patent are ineligible under § 101.

As mentioned, each and every limitation of the asserted ’878 patent claims was well-understood, routine, and conventional as of the priority dates of the ’878 patent. For example, without limitation, the following limitations and/or concepts were well-understood, routine, and

conventional—both as individual concepts and in an ordered combination in the claim—as of the priority dates of the '878 patent:

- computer system is programmed and connected to perform a method of identifying an association among multiple electronic devices of a group of devices connected through a common local area network (LAN) and using the association for cross-device action
- cross-device action
- devices connected through a common local area network (LAN)
- determining an association between device identifiers of two or more Internet-accessing electronic devices based on electronically stored association-detection information about a plurality of Internet-accessing electronic devices
- association between device identifiers of two or more Internet-accessing electronic devices
- stored association-detection information
- device identifier
- dynamically assigned IP address assigned to a modem that connects a router of the LAN to the Internet
- timestamp specifying a time when the Internet-accessing electronic device accessed the Internet via the router of the LAN

Defendants further reserve their right to submit and rely upon expert testimony in support of its arguments regarding patent ineligibility.

E. THE '164 PATENT

1. IDENTIFICATION OF INVALIDITY GROUNDS

Based on the reasons identified herein and the accompanying charts and references, a person having ordinary skill in the art would have found the Asserted Claims of the '164 patent invalid under 35 U.S.C. §§ 102 and/or 103. The '164 patent invalidity charts attached as Exhibits E1-E9 set forth herein, for corresponding limitations of an asserted claim, exemplary disclosures from each identified reference in an invalidity ground below where applicable. Defendants reserve the right to amend their invalidity grounds or charts, or provide supplemental grounds or charts, based on any amendments to Plaintiff's infringement contentions, or information or documents that may be obtained as discovery begins including third party discovery.

Defendants provide the following identification of exemplary invalidity grounds for the currently Asserted Claims of the '164 patent:

Claim No.	Exemplary Invalidity Grounds^{19, 20} under 35 U.S.C. §§ 102 and/or 103²¹
1	Madhavan in view of de Heer and Shkedi
3	Madhavan in view of de Heer and Shkedi
4	Madhavan in view of Shkedi
16	Madhavan in view of de Heer and Shkedi
22	Madhavan in view of Shkedi

¹⁹ For brevity, each reference in this table is identified by its short cite, which is defined later in subsections III.B.2 and III.B.2.b below.

²⁰ To the extent the grounds identified in the below table for a particular asserted claim refer back to the grounds identified for another claim, the grounds disclose the particular asserted claim for the reasons identified in the corresponding claim charts for the particular asserted claim.

²¹ Defendants contend that any combination of references identified in this table as a ground invalidates the relevant asserted claim under 35 U.S.C. § 103. In addition, each reference identified by itself as a ground invalidates the relevant asserted claim under 35 U.S.C. § 102 and 103.

2. IDENTIFICATION OF INVALIDITY DUE TO ANTICIPATION

The table below lists the prior art references that anticipate one or more of the Asserted Claims of the '164 patent under 35 U.S.C. § 102. The attached claim charts in Exhibits E1-E9 demonstrate where each limitation of the Asserted Claims is found in the references listed below, either expressly or inherently in the larger context of the passage, as understood by a person having ordinary skill in the art. The following references are prior art under at least 35 U.S.C. §§ 102(a), (b), or (e).

a. Prior Art Patents and Patent Publications That Anticipate the Asserted Claims of the '164 Patent

Patent or Patent Publication No.	Filing Date / Priority Date	Date of Issue or Publication	Short Cite
US20090119151	Nov. 1, 2007	May 7, 2009	de Heer
US2008082413A1	Oct. 3, 2006	Apr. 3, 2008	Madhavan
JP2007150762	Nov. 28, 2005	Jun. 14, 2007	Takeichi
US20030080997	Oct. 18, 2002	May 1, 2003	Fuehren
US20080281697A1	Jun. 29, 2007	Nov. 13, 2008	Whitehead
US7861260	Apr. 17, 2007	Dec. 28, 2010	Shkedi
US20070157247	Dec. 29, 2005	Jul. 5, 2007	Cordray

b. Prior Art Systems/Services That Anticipate the Asserted Claims of the '164 Patent

System/Service	Relevant Dates	Persons/Entities Involved in Prior Use, Sale, and/or Offers for Sale	Short Cite
DoubleClick	At least as early as 1999	Google, Inc.	DoubleClick
Jambo	At least as early as August 2006	Jambo.com	Jambo

3. IDENTIFICATION OF INVALIDITY DUE TO OBVIOUSNESS

The tables below list prior art references that render one or more of the Asserted Claims of the '164 patent invalid as obvious under 35 U.S.C. § 103, alone or in combination with the

knowledge of a person having ordinary skill in the art and/or other prior art. The attached claim charts in Exhibits E1-E9, respectively, demonstrate where each limitation of the Asserted Claims is found in the references listed below, either expressly or inherently in the larger context of the passage, as understood by a person having ordinary skill in the art. The following references are prior art under at least 35 U.S.C. §§ 102(a), (b), or (e).

a. Prior Art Patents and Patent Publications That Render Obvious the Asserted Claims of the '164 Patent

Patent or Patent Publication No.	Filing Date / Priority Date	Date of Issue or Publication	Short Cite
US20090119151	Nov. 1, 2007	May 7, 2009	de Heer
US2008082413A1	Oct. 3, 2006	Apr. 3, 2008	Madhavan
JP2007150762	Nov. 28, 2005	Jun. 14, 2007	Takeichi
US20030080997	Oct. 18, 2002	May 1, 2003	Fuehren
US20080281697A1	Jun. 29, 2007	Nov. 13, 2008	Whitehead
US7861260	Apr. 17, 2007	Dec. 28, 2010	Shkedi
US20070157247	Dec. 29, 2005	Jul. 5, 2007	Cordray

b. Prior Art Systems/Services That Render Obvious the Asserted Claims of the '164 Patent

System/Service	Relevant Dates	Persons/Entities Involved in Prior Use, Sale, and/or Offers for Sale	Short Cite
DoubleClick	At least as early as 1999	Google, Inc.	Doubleclick
Jambo	At least as early as August 2006	Jambo.com	Jambo

c. Motivations for Combining Prior Art

Defendants incorporate by reference the reservation of rights, legal standard, and motivation to combine set forth in Section III.A.3.b, *supra*, as though fully set forth herein.

The '164 patent is invalid in view of the combinations of references disclosed above. A person having ordinary skill in the art at the effective filing date of the '164 patent would have naturally consulted each of these references and combined the teachings, for at least the reasons

provided below. Accordingly, a POSITA would have been motivated to combine elements of the references identified above, recognizing that the combination would be a predictable use of elements known in the art to solve known problems by using known techniques, resulting in expected outcomes. Defendants' expert(s) may further explain the motivation to combine prior art and why the asserted claims of the asserted patents are invalid as obvious in accordance with the case schedule. Nothing herein is intended to limit or preclude such future expert opinion.

A POSITA would have understood the references listed above, alone or in combination, to contain explicit and/or implicit teaching, suggestion, and/or rationales to combine them for at least the following exemplary reasons.²²

Group A: "Online Targeted Ad and Content Delivery Art"

Claims 1 and 2 of the '164 patent recite limitations relating to targeted advertisement/content delivery to an online user device, and the references identified below that disclose and/or suggest the obviousness of the claimed subject matter are grouped as "Online Targeted Ad and Content Delivery Art" references for the purposes of these contentions and the disclosure of obviousness combinations.

Nothing about the claimed subject matter adds anything novel or non-obvious over the prior art. To the contrary, the claimed subject matter was well-known, routine, conventional, and widely available long before the alleged invention, as reflected in the disclosures of references

²² In *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398 (2007), the Supreme Court held that prior art need not disclose the precise teachings of a patented invention to render it obvious, because a court "can take account of the inferences and creative steps that a person of ordinary skill in the art would employ." *Id.* at 418. Under *KSR*, an explanation for why a combination of prior art items renders a claim obvious may be found in the "interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art." *Id.* at 418.

cited in the claim charts submitted herewith that Defendant may rely upon. The implementation and use of the claimed subject matter also would have been obvious to a person of ordinary skill in the art least because doing so would have involved the combination of prior art elements according to known methods to yield predictable results, the simple substitution of one known element for another to obtain predictable results, the application of a known technique to a known device ready for improvement to yield predictable results, and/or would have been obvious to try. A person of ordinary skill in the art would have readily appreciated the well-known and widespread use of this subject matter and the associated benefits and advantages of their use. Moreover, references from the time of the purported invention of the patent in similar and related fields disclosed relevant teachings reflecting motivations to combine, as reflected in the subject matters cited and presented in the claim charts submitted herewith and/or referenced below, which Defendant may rely upon.

- Madhavan (describing targeted advertisement delivery to a user/device)
- de Heer (describing targeted advertisement delivery to a user device)
- Shkedi (describing targeted advertisement delivery to a set top box/device)
- DoubleClick (describing targeted content delivery based on user behavior)

Group B: “IP and Network Association Art”

Claims 1 and 2 of the '164 patent recite limitations relating to identifying and/or associating multiple users and/or devices based on a common local area network or common IP addresses, and the references identified below that disclose and/or suggest the obviousness of the claimed subject matter are grouped as “IP and Network Association Art” references for the purposes of these contentions and the disclosure of obviousness combinations.

Nothing about the claimed subject matter adds anything novel or non-obvious over the prior art. To the contrary, the claimed subject matter was well-known, routine, conventional, and widely available long before the alleged invention, as reflected in the disclosures of references cited in the claim charts submitted herewith that Defendant may rely upon. The implementation and use of the claimed subject matter also would have been obvious to a person of ordinary skill in the art least because doing so would have involved the combination of prior art elements according to known methods to yield predictable results, the simple substitution of one known element for another to obtain predictable results, the application of a known technique to a known device ready for improvement to yield predictable results, and/or would have been obvious to try. A person of ordinary skill in the art would have readily appreciated the well-known and widespread use of this subject matter and the associated benefits and advantages of their use. Moreover, references from the time of the purported invention of the patent in similar and related fields disclosed relevant teachings reflecting motivations to combine, as reflected in the subject matters cited and presented in the claim charts submitted herewith and/or referenced below, which Defendant may rely upon.

- de Heer (describing identification of users from a common LAN)
- Shkedi (describing identification of users from a common LAN)
- DoubleClick (describing identification of users and browsers by cookies which include IP addresses and timestamps)

Group C: “Ad/Content viewing User Behavior Art”

Claims 1 and 2 of the '164 patent recite limitations relating to obtaining user profile information based on user behavior in response to watching a TV advertisement or content, and

the references identified below that disclose and/or suggest the obviousness of the claimed subject matter are grouped as “Ad/Content viewing User Behavior Art” references for the purposes of these contentions and the disclosure of obviousness combinations.

Nothing about the claimed subject matter adds anything novel or non-obvious over the prior art. To the contrary, the claimed subject matter was well-known, routine, conventional, and widely available long before the alleged invention, as reflected in the disclosures of references cited in the claim charts submitted herewith that Defendant may rely upon. The implementation and use of the claimed subject matter also would have been obvious to a person of ordinary skill in the art least because doing so would have involved the combination of prior art elements according to known methods to yield predictable results, the simple substitution of one known element for another to obtain predictable results, the application of a known technique to a known device ready for improvement to yield predictable results, and/or would have been obvious to try. A person of ordinary skill in the art would have readily appreciated the well-known and widespread use of this subject matter and the associated benefits and advantages of their use. Moreover, references from the time of the purported invention of the patent in similar and related fields disclosed relevant teachings reflecting motivations to combine, as reflected in the subject matters cited and presented in the claim charts submitted herewith and/or referenced below, which Defendant may rely upon.

- a. Madhavan (describing collecting data on a user’s actions and responses to a television program)
- b. de Heer (describing collecting data on user’s interaction with television content and advertisements)

Group A relates to targeted advertisement/content delivery to an online user device. Any reference in Group A can be combined with any other reference in Group A at least because a person of ordinary skill in the art (POSITA) would have known that substituting elements of one reference would have been a simple substitution of one known element for another to obtain predictable results, or the use of a known technique to improve similar devices (methods, or products) in the same way, or applying a known technique to a known device (method, or product) ready for improvement to yield predictable results, or simply combining prior art elements according to known methods to yield predictable results. For example, while Madhavan discloses a user “coupled” to both a “media device” and a “client machine” it does not expressly disclose a common local area network (LAN). However, Shkedi expressly discloses a common LAN for the online user device and the media device (e.g., a set top box). One of ordinary skill in the art would have been motivated to combine Madhavan with Shkedi because both relate to targeted content to a user device, and the benefit of recognizing the use of a common LAN could be realized by implementing that feature from Shkedi with the system of Madhavan as a simple substitution of a “coupling” of multiple devices for including the devices in a “common LAN.” This combination would lead to no more than predictable results. Similarly, one of ordinary skill in the art would have recognized that Madhavan could be combined with de Heer to realize the benefits of broadening the utilization of “online behavior” in Madhavan to also utilize “interaction with TV content” as no more than a simple substitution in comparable, related systems that would lead to no more than predictable results.

Similarly, Group B relates to identifying and/or associating multiple users and/or devices based on a common local area network or common IP addresses. Any reference in Group B can be combined with any other reference in Group B at least because a person of ordinary skill in the

art (POSITA) would have known that substituting elements of one reference would have been a simple substitution of one known element for another to obtain predictable results, or the use of a known technique to improve similar devices (methods, or products) in the same way, or applying a known technique to a known device (method, or product) ready for improvement to yield predictable results, or simply combining prior art elements according to known methods to yield predictable results. For example, while Shkedi does not expressly disclose interaction with TV content, de Heer expressly discloses collecting data on user behavior while the user is interacting with the TV content. Shkedi can be combined with de Heer because both relate to identifying and/or associating multiple users and/or devices based on a common local area network or common IP addresses and it would have been obvious for a POSITA to implement the feature of de Heer allowing the collecting of data on user behavior while the user is interacting with the TV as an additional source of information in the system of Shkedi as little more than the use of a known technique to a known device ready for improvement to yield predictable results.

Further, any reference in Group A could have been combined with any reference in Group B and/or Group C because they were within the same field of technology, and a POSITA would have understood that one would have been motivated to combine the targeted content of a reference from A with targeting the content to a second device as in a reference from Group C because these were related systems intended to work with one another as part of a larger advertising system. For example, a reference from Group A that discloses a targeted advertising system would be able to benefit from additional targeting information about a user that could be collected by utilizing an association of devices as an identification of multiple inputs for user information, as would be disclosed by Group B references. One of ordinary skill in the art would have further recognized that to target a user, advertising and content viewing information would be needed as an input, and

would have been motivated to combine those references in Groups A and/or B with references in Group C to be able to collect information about a user for use in targeted advertising system. This would have been no more than the simple combination of known elements ready for improvement, and/or the application of known techniques to known devices (methods, or products) ready for improvement to yield predictable results, and it would have been obvious to try to collect information about users connected to the LAN with a reasonable expectation of success.

4. INVALIDITY UNDER § 112

The Asserted Claims are invalid under 35 U.S.C. § 112. Defendants incorporate by reference the discussion contained in Section 0 set forth above, as similarly applying to the '164 patent.

At least the following claims of the '164 patent, and all claims depending on these claims, are invalid for failing to meet the requirements of 35 U.S.C. § 112:

Claim Element	Patent (Claims)	§ 112 Grounds
“automatically”	1	Indefinite pursuant to pre-AIA § 112, para. 2 Lack of written description pursuant to pre-AIA § 112, para. 1 Lack of enablement pursuant to pre-AIA § 112, para. 1
“independently of each other”	1	Indefinite pursuant to pre-AIA § 112, para. 2 Lack of written description pursuant to pre-AIA § 112, para. 1 Lack of enablement pursuant to pre-AIA § 112, para. 1
“wherein which online advertisement is delivered to which online user interface device depends on differences between the first user profile and the second user profile”	3	Indefinite pursuant to pre-AIA § 112, para. 2 Lack of written description pursuant to pre-AIA § 112, para. 1 Lack of enablement pursuant to pre-AIA § 112, para. 1

5. INVALIDITY UNDER § 101

The asserted claims of the '164 patent do not comply with the requirements of 35 U.S.C. § 101. Defendants incorporate by reference the legal discussion contained in Section III.A.5 set forth above.

Alice Step One: The asserted claims of the '164 patent are directed to an abstract idea, for example the abstract idea of targeting an advertisement to a device based on user profile information derived from data from a set-top box connected to the same local area network. *See* '164 patent at claim 1. Each of the independent claims comprises essentially the same basic step: directing an advertisement to a device based on an advertisement delivered to a set-top box associated with the device. *See, e.g.,* '164 patent at claim 1. But the claims disclose no specific technological solution for doing so, instead leaving the POSITA to achieve the claimed results using existing or yet-to-be-invented technology.

The asserted dependent claims are also directed to the same abstract idea of targeting an advertisement to a device based on user profile information derived from data from a set-top box connected to the same local area network. Thus, all asserted claims of the '164 patent are directed to an abstract idea.

As the Federal Circuit has explained, “An abstract idea can generally be described at different levels of abstraction.” *Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1240 (Fed. Cir. 2016). The abstract ideas offered herein are exemplary, and additional abstract ideas at different levels of abstract may be appropriate. This case is still in its early stages; Defendants reserve the right to provide supplemental contentions in view of information or documents received from Plaintiffs or third parties or that Defendants locate from ongoing investigation, or in response to determinations by this Court. Defendants reserve the right to adopt additional or different

descriptions of the abstract idea to which the Asserted Claims are directed, including, without limitation, abstract ideas as identified by other Defendants in any prior or pending court action or proceeding, including but not limited to, the Prior and Pending Actions, which Defendants incorporate by reference herein.

Alice Step Two: The asserted claims of the '164 patent do not recite an inventive concept sufficient to transform their subject matter into something more than the abstract idea. Each and every limitation of the '164 patent claims was well-understood, routine, and conventional as of the priority dates of the '164 patent, as demonstrated by the references provided in Sections III.B.2 and III.B.2.b and described in detail above. The '164 patent claim nothing more than this idea, rather than any specific inventive application of this idea. *See Affinity Labs*, 838 F.3d at 1262. There are no “additional features” in the claims that account for more than “well-understood, routine, conventional activity.” *See id.*

As such, similar to *Affinity Labs*, where the Court found the claims ineligible under § 101, the claims and the shared specification do not contain an “inventive concept that transforms the abstract idea” of targeting an advertisement to a device based on user profile information derived from data from a set-top box connected to the same local area network “into a patent-eligible application of that abstract idea.” *See Affinity Labs*, 838 F.3d at 1262. The asserted claims of the '164 patent recite only generic components and/or insignificant post-solution activity, without any specific technical solution or improvement to existing technologies to implement the underlying idea, and thus add nothing inventive to the claims. This is insufficient to transform the claimed abstract idea into patent-eligible subject matter. *See, e.g., Alice*, 573 U.S. at 225-26 (holding that “implement[ing] the abstract idea . . . on a generic computer” was not sufficient “to transform an abstract idea into a patent-eligible invention”); *Intellectual Ventures I*, 850 F.3d at 1341-42

(holding that “using generic computer components and conventional computer data processing activities” was not sufficient to find an “inventive concept”); *In re TLI Commc’ns LLC Pat. Litig.*, 823 F.3d at 614 (“[G]eneric computer components [are] insufficient to add an inventive concept to an otherwise abstract idea.”); *Two-Way Media*, 874 F.3d at 1339 (“Nothing in the claims or their constructions. . . . requires anything other than conventional computer and network components operating according to their ordinary functions.”). The dependent claims merely narrow the abstract idea, and thus also add nothing inventive. *See Content Extraction & Transmission LLC*, 776 F.3d at 1349 (dependent claims of narrower scope and using conventional techniques are non-inventive). Therefore, the asserted claims of the ’164 patent are ineligible under § 101.

As mentioned, each and every limitation of the asserted ’164 patent claims was well-understood, routine, and conventional as of the priority dates of the ’164 patent. For example, without limitation, the following limitations and/or concepts were well-understood, routine, and conventional—both as individual concepts and in an ordered combination in the claim—as of the priority dates of the ’164 patent:

- hardware computer system coupled to the Internet
- online user interface device
- automatically causing, in response to online activity from a first online user interface device, a first selected online advertisement to be directed to the first online user interface device
- access identifier
- which online user interface device corresponds, at a time the first selected online advertisement is directed, to a first online access identifier
- first selected online advertisement is selected based on information from a first user profile,

- set-top box
- set-top box identifier
- first online access identifier
- which first user profile references or includes a first set-top box identifier that the computer system has electronically associated with the first online access identifier;
- wherein the information . . . is derived at least in part from automatically collected first data related to user behavior with respect to at least one television advertisement delivered to a set-top box,
- set-top box corresponds, at a time of that user behavior, to the first set-top box identifier
- personally identifiable information
- first set-top box identifier and the first online access identifier are associated without using personally identifiable information pertaining to either a user of the first online user interface device or a user of the set-top box that corresponds to the first set-top box identifier
- online user interface device
- automatically recognizing that the online user interface device corresponding to the first online access identifier and the set-top box corresponding to the first set-top box identifier are connected, independently of each other, to a common local area network.
- causing, in response to online activity from a second online user interface device, a second selected online advertisement to be directed to the second online user interface device,
- second online user interface device corresponds, at a time the second selected online advertisement is directed, to a second online access identifier;

- the second selected online advertisement is selected based on information from a second user profile
- second user profile references or includes a second set-top box identifier that the computer system has electronically associated with the second online access identifier;
- information . . . derived at least in part from automatically collected second data related to user behavior with respect to at least one television advertisement delivered to a set-top box
- which set-top box corresponds, at a time of that user behavior, to the second set-top box identifier
- second set-top box identifier and the second online access identifier are associated without using personally identifiable information pertaining to either a user of the second online user interface device or a user of the set-top box that corresponds to the second set-top box identifier
- automatically recognizing that the online user interface device corresponding to the second online access identifier and the set-top box corresponding to the second set-top box identifier are connected, independently of each other, to a common local area network
- online advertisement is delivered to which online user interface device depends on differences between the first user profile and the second user profile
- a third party that provides television service to the user of the set-top box that corresponds to the second set-top box identifier
- the act in part (i) is performed without causing online behavioral profile information from the second user profile to be transmitted to a third party that provides television service to the user of the set-top box that corresponds to the second set-top box identifier

- programmed and connected to automatically cause the first selected online advertisement to be directed to the first online user interface device
- causing online behavioral profile information from the first user profile to be transmitted to a third party
- programmed and connected to automatically cause the first selected online advertisement to be directed to the first online user interface device without causing online behavioral profile information from the first user profile to be transmitted to a third party that provides television service to the user of the set-top box that corresponds to the first set-top box identifier.

Defendants further reserve their right to submit and rely upon expert testimony in support of its arguments regarding patent ineligibility.

F. THE '198 PATENT

1. IDENTIFICATION OF INVALIDITY GROUNDS

Based on the reasons identified herein and the accompanying charts and references, a person having ordinary skill in the art would have found the Asserted Claims of the '198 patent invalid under 35 U.S.C. §§ 102 and/or 103. The '198 patent invalidity charts attached as Exhibits F1-F9 set forth herein, for corresponding limitations of an asserted claim, exemplary disclosures from each identified reference in an invalidity ground below where applicable. Defendants reserve the right to amend their invalidity grounds or charts, or provide supplemental grounds or charts, based on any amendments to Plaintiff's infringement contentions, or information or documents that may be obtained as discovery begins including third party discovery.

Defendants provide the following identification of exemplary invalidity grounds for the currently Asserted Claims of the '198 patent:

Claim No.	Exemplary Invalidity Grounds^{23, 24} under 35 U.S.C. §§ 102 and/or 103²⁵
1	De Heer in view of Shkedi
16	Shkedi
18	De Heer in view of Shkedi
19	De Heer in view of Shkedi
20	De Heer De Heer in view of Madhavan
21	De Heer
22	Madhavan in view of Shkedi
23	Madhavan in view of Shkedi
24	Shkedi
25	De Heer

2. IDENTIFICATION OF INVALIDITY DUE TO ANTICIPATION

The table below lists the prior art references that anticipate one or more of the Asserted Claims of the '198 patent under 35 U.S.C. § 102. The attached claim charts in Exhibits F1-F9 demonstrate where each limitation of the Asserted Claims is found in the references listed below, either expressly or inherently in the larger context of the passage, as understood by a person having ordinary skill in the art. The following references are prior art under at least 35 U.S.C. §§ 102(a), (b), or (e).

²³ For brevity, each reference in this table is identified by its short cite, which is defined later in subsections III.B.2 and III.B.2.b below.

²⁴ To the extent the grounds identified in the below table for a particular asserted claim refer back to the grounds identified for another claim, the grounds disclose the particular asserted claim for the reasons identified in the corresponding claim charts for the particular asserted claim.

²⁵ Defendants contend that any combination of references identified in this table as a ground invalidates the relevant asserted claim under 35 U.S.C. § 103. In addition, each reference identified by itself as a ground invalidates the relevant asserted claim under 35 U.S.C. § 102 and 103.

a. Prior Art Patents and Patent Publications That Anticipate the Asserted Claims of the '198 Patent

Patent or Patent Publication No.	Filing Date / Priority Date	Date of Issue or Publication	Short Cite
US20090119151	Nov. 1, 2007	May 7, 2009	de Heer
US20020059094	Jun. 7, 2001	May 16, 2002	Hosea
US7861260	Apr. 17, 2007	Dec. 28, 2010	Shkedi
US2008082413	Oct. 3, 2006	Apr. 3, 2008	Madhavan
US20080281697	Jun. 29, 2007	Nov. 13, 2008	Whitehead
US20030229893	Apr. 26, 2000	Dec. 11, 2003	Sgaraglino
US20070157247	Dec. 29, 2005	Jul. 5, 2007	Cordray

b. Prior Art Systems/Services That Anticipate the Asserted Claims of the '198 Patent

System/Service	Relevant Dates	Persons/Entities Involved in Prior Use, Sale, and/or Offers for Sale	Short Cite
Google TV Ads	At least as early as 2007	Google, Inc.	Google TV Ad
TiVo	At least as early as June 2003	Tivo.com	TiVo

3. IDENTIFICATION OF INVALIDITY DUE TO OBVIOUSNESS

The tables below list prior art references that render one or more of the Asserted Claims of the '198 patent invalid as obvious under 35 U.S.C. § 103, alone or in combination with the knowledge of a person having ordinary skill in the art and/or other prior art. The attached claim charts in Exhibits F1-F9, respectively, demonstrate where each limitation of the Asserted Claims is found in the references listed below, either expressly or inherently in the larger context of the passage, as understood by a person having ordinary skill in the art. The following references are prior art under at least 35 U.S.C. §§ 102(a), (b), or (e).

a. Prior Art Patents and Patent Publications That Render Obvious the Asserted Claims of the '198 Patent

Patent or Patent Publication No.	Filing Date / Priority Date	Date of Issue or Publication	Short Cite
US20090119151	Nov. 1, 2007	May 7, 2009	de Heer
US20020059094	Jun. 7, 2001	May 16, 2002	Hosea
US7861260	Apr. 17, 2007	Dec. 28, 2010	Shkedi
US2008082413	Oct. 3, 2006	Apr. 3, 2008	Madhavan
US20080281697	Jun. 29, 2007	Nov. 13, 2008	Whitehead
US20030229893	Apr. 26, 2000	Dec. 11, 2003	Sgaraglino
US20070157247	Dec. 29, 2005	Jul. 5, 2007	Cordray

b. Prior Art Systems/Services That Render Obvious the Asserted Claims of the '198 Patent

System/Service	Relevant Dates	Persons/Entities Involved in Prior Use, Sale, and/or Offers for Sale	Short Cite
Google TV Ads	At least as early as 2007	Google, Inc.	Google TV Ad
TiVo	At least as early as June 2003	TiVo.com	TiVo

c. Motivations for Combining Prior Art

Defendants incorporate by reference the reservation of rights, legal standard, and motivation to combine set forth in Section III.A.3.b, *supra*, as though fully set forth herein.

The '198 patent is invalid in view of the combinations of references disclosed above. A person having ordinary skill in the art at the effective filing date of the '198 patent would have naturally consulted each of these references and combined the teachings, for at least the reasons provided below. Accordingly, a POSITA would have been motivated to combine elements of the references identified above, recognizing that the combination would be a predictable use of elements known in the art to solve known problems by using known techniques, resulting in expected outcomes. Defendants' expert(s) may further explain the motivation to combine prior art and why the asserted claims of the asserted patents are invalid as obvious in accordance with

the case schedule. Nothing herein is intended to limit or preclude such future expert opinion.

A POSITA would have understood the references listed above, alone or in combination, to contain explicit and/or implicit teaching, suggestion, and/or rationales to combine them for at least the following exemplary reasons.²⁶

Group A: Targeted Advertisement/Content Delivery:

Claims 1, 16, and 18-25 of the '198 patent recite limitations relating to targeted advertisement/content delivery to an online user device or a media device, and the references identified below that disclose and/or suggest the obviousness of the claimed subject matter are grouped as “Targeted Advertisement/Content Delivery” references for the purposes of these contentions and the disclosure of obviousness combinations.

Nothing about the claimed subject matter adds anything novel or non-obvious over the prior art. To the contrary, the claimed subject matter was well-known, routine, conventional, and widely available long before the alleged invention, as reflected in the disclosures of references cited in the claim charts submitted herewith that Defendant may rely upon. The implementation and use of the claimed subject matter also would have been obvious to a person of ordinary skill in the art least because doing so would have involved the combination of prior art elements according to known methods to yield predictable results, the simple substitution of one known element for another to obtain predictable results, the application of a known technique to a known

²⁶ In *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398 (2007), the Supreme Court held that prior art need not disclose the precise teachings of a patented invention to render it obvious, because a court “can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *Id.* at 418. Under *KSR*, an explanation for why a combination of prior art items renders a claim obvious may be found in the “interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art.” *Id.* at 418.

device ready for improvement to yield predictable results, and/or would have been obvious to try. A person of ordinary skill in the art would have readily appreciated the well-known and widespread use of this subject matter and the associated benefits and advantages of their use. Moreover, references from the time of the purported invention of the patent in similar and related fields disclosed relevant teachings reflecting motivations to combine, as reflected in the subject matters cited and presented in the claim charts submitted herewith and/or referenced below, which Defendant may rely upon.

- Madhavan (describing targeted advertisement delivery to a user device)
- de Heer (describing targeted advertisement delivery to a user device)
- Shkedi (describing targeted advertisement delivery to a set top box/device)
- Google TV Ad (describing targeted content delivery based on user behavior)

Group B: Use of Date and Time for Identifying and Distinguishing Users:

Claims 1, 16, and 18-25 of the '198 patent recite limitations relating to use of date and time for identifying and distinguishing users, and the references identified below that disclose and/or suggest the obviousness of the claimed subject matter are grouped as "Use of Date and Time for Identifying and Distinguishing Users" references for the purposes of these contentions and the disclosure of obviousness combinations.

Nothing about the claimed subject matter adds anything novel or non-obvious over the prior art. To the contrary, the claimed subject matter was well-known, routine, conventional, and widely available long before the alleged invention, as reflected in the disclosures of references cited in the claim charts submitted herewith that Defendant may rely upon. The implementation and use of the claimed subject matter also would have been obvious to a person of ordinary skill

in the art least because doing so would have involved the combination of prior art elements according to known methods to yield predictable results, the simple substitution of one known element for another to obtain predictable results, the application of a known technique to a known device ready for improvement to yield predictable results, and/or would have been obvious to try. A person of ordinary skill in the art would have readily appreciated the well-known and widespread use of this subject matter and the associated benefits and advantages of their use. Moreover, references from the time of the purported invention of the patent in similar and related fields disclosed relevant teachings reflecting motivations to combine, as reflected in the subject matters cited and presented in the claim charts submitted herewith and/or referenced below, which Defendant may rely upon.

- Shkedi (describing the use of date and time for identifying and distinguishing users)

Group C: “TV Ad User Profile Art”

Claims 1, 16, and 18-25 of the '198 patent recite limitations relating to obtaining user profile information based on user behavior in response to watching a TV advertisement, and the references identified below that disclose and/or suggest the obviousness of the claimed subject matter are grouped as “TV Ad User Profile Art” references for the purposes of these contentions and the disclosure of obviousness combinations.

Nothing about the claimed subject matter adds anything novel or non-obvious over the prior art. To the contrary, the claimed subject matter was well-known, routine, conventional, and widely available long before the alleged invention, as reflected in the disclosures of references cited in the claim charts submitted herewith that Defendant may rely upon. The implementation and use of the claimed subject matter also would have been obvious to a person of ordinary skill

in the art least because doing so would have involved the combination of prior art elements according to known methods to yield predictable results, the simple substitution of one known element for another to obtain predictable results, the application of a known technique to a known device ready for improvement to yield predictable results, and/or would have been obvious to try. A person of ordinary skill in the art would have readily appreciated the well-known and widespread use of this subject matter and the associated benefits and advantages of their use. Moreover, references from the time of the purported invention of the patent in similar and related fields disclosed relevant teachings reflecting motivations to combine, as reflected in the subject matters cited and presented in the claim charts submitted herewith and/or referenced below, which Defendant may rely upon.

- de Heer (describing user profile information based on user behavior while watching a TV advertisement)
- Google TV Ad (describing collecting data on user behavior while watching TV advertisements)
- TiVo (describing collecting data on user behavior while watching TV content and advertisements)

Group A relates to targeted advertisement/content delivery to an online user device. Any reference in Group A can be combined with any other reference in Group A at least because a person of ordinary skill in the art (POSITA) would have known that substituting elements of one reference would have been a simple substitution of one known element for another to obtain predictable results, or the use of a known technique to improve similar devices (methods, or products) in the same way, or applying a known technique to a known device (method, or product) ready for improvement to yield predictable results, or simply combining prior art elements

according to known methods to yield predictable results. For example, while Madhavan discloses user profile information based on the user's online behavior it does not expressly disclose the user profile information based on the user's TV content interaction. However, de Heer expressly discloses collecting data regarding a user's behavior while interacting with the TV content. Madhavan can be combined with de Heer because both relate to targeted content to a user device and a POSITA would have known that simple substitution of user profile information based on a user's online behavior for the user's TV interaction behavior would lead to predictable results.

Further, any reference in Group A could have been combined with any reference in Group B and/or Group C because they were within the same field of technology, and a POSITA would have understood that you could combine the targeted content of a reference from A with the references from Group B using date and time for identifying and distinguishing users and/or with the Group C references utilizing the user's TV content interaction behavior for the user's profile because these were related systems intended to work with one another as part of a larger advertising system. These would have been recognized by one of ordinary skill in the art as a simple combinations of known elements ready for improvement and it would have been obvious to try with a reasonable expectation of success, or the simple combination of known elements ready for improvement, and/or the application of known techniques to known devices (methods, or products) ready for improvement to yield predictable results.

4. INVALIDITY UNDER § 112

The Asserted Claims are invalid under 35 U.S.C. § 112. Defendants incorporate by reference the discussion contained in Section 0 set forth above, as similarly applying to the '198 patent.

At least the following claims of the '198 patent, and all claims depending on these claims, are invalid for failing to meet the requirements of 35 U.S.C. § 112:

Claim Element	Patent (Claims)	§ 112 Grounds
“automatically”	1, 18	Indefinite pursuant to pre-AIA § 112, para. 2 Lack of written description pursuant to pre-AIA § 112, para. 1 Lack of enablement pursuant to pre-AIA § 112, para. 1
“using the notification”	1, 18	Indefinite pursuant to pre-AIA § 112, para. 2 Lack of written description pursuant to pre-AIA § 112, para. 1 Lack of enablement pursuant to pre-AIA § 112, para. 1

5. INVALIDITY UNDER § 101

The asserted claims of the '198 patent do not comply with the requirements of 35 U.S.C. § 101. Defendants incorporate by reference the legal discussion contained in Section III.A.5 set forth above.

Alice Step One: The asserted claims of the '198 patent are directed to an abstract idea, for example the abstract idea of causing an action on a device based on a notification of an advertisement presented using a set-top box that is associated with the device. *See* '198 patent at claim 1. Each of the independent claims comprises essentially the same basic steps: (1) receiving a notification about an advertisement being shown via a set-top box, (2) causing an action based on the notification on a user device associated with the set-top box. *See, e.g.,* '198 patent at claim 1. But the claims disclose no specific technological solution for doing so, instead leaving the POSITA to achieve the claimed results using existing or yet-to-be-invented technology.

The asserted dependent claims are also directed to the same abstract idea of causing an action on a device based on a notification of an advertisement presented using a set-top box that is associated with the device. Thus, all asserted claims of the '198 patent are directed to an abstract idea.

As the Federal Circuit has explained, “An abstract idea can generally be described at different levels of abstraction.” *Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1240 (Fed. Cir. 2016). The abstract ideas offered herein are exemplary, and additional abstract ideas at different levels of abstract may be appropriate. This case is still in its early stages; Defendants reserve the right to provide supplemental contentions in view of information or documents received from Plaintiffs or third parties or that Defendants locate from ongoing investigation, or in response to determinations by this Court. Defendants reserve the right to adopt additional or different descriptions of the abstract idea to which the Asserted Claims are directed, including, without limitation, abstract ideas as identified by other Defendants in any prior or pending court action or proceeding, including but not limited to, the Prior and Pending Actions, which Defendants incorporate by reference herein.

Alice Step Two: The asserted claims of the ’198 patent do not recite an inventive concept sufficient to transform their subject matter into something more than the abstract idea. Each and every limitation of the ’198 patent claims was well-understood, routine, and conventional as of the priority dates of the ’198 patent, as demonstrated by the references provided in Sections III.B.2 and III.B.2.b and described in detail above. The ’198 patent claim nothing more than this idea, rather than any specific inventive application of this idea. *See Affinity Labs*, 838 F.3d at 1262. There are no “additional features” in the claims that account for more than “well-understood, routine, conventional activity.” *See id.*

As such, similar to *Affinity Labs*, where the Court found the claims ineligible under § 101, the claims and the shared specification do not contain an “inventive concept that transforms the abstract idea” of causing an action on a device based on a notification of an advertisement presented using a set-top box that is associated with the device “into a patent-eligible application

of that abstract idea.” See *Affinity Labs*, 838 F.3d at 1262. The asserted claims of the ’198 patent recite only generic components and/or insignificant post-solution activity, without any specific technical solution or improvement to existing technologies to implement the underlying idea, and thus add nothing inventive to the claims. This is insufficient to transform the claimed abstract idea into patent-eligible subject matter. See, e.g., *Alice*, 573 U.S. at 225-26 (holding that “implement[ing] the abstract idea . . . on a generic computer” was not sufficient “to transform an abstract idea into a patent-eligible invention”); *Intellectual Ventures I*, 850 F.3d at 1341-42 (holding that “using generic computer components and conventional computer data processing activities” was not sufficient to find an “inventive concept”); *In re TLI Commc’ns LLC Pat. Litig.*, 823 F.3d at 614 (“[G]eneric computer components [are] insufficient to add an inventive concept to an otherwise abstract idea.”); *Two-Way Media*, 874 F.3d at 1339 (“Nothing in the claims or their constructions. . . requires anything other than conventional computer and network components operating according to their ordinary functions.”). The dependent claims merely narrow the abstract idea, and thus also add nothing inventive. See *Content Extraction & Transmission LLC*, 776 F.3d at 1349 (dependent claims of narrower scope and using conventional techniques are non-inventive). Therefore, the asserted claims of the ’198 patent are ineligible under § 101.

As mentioned, each and every limitation of the asserted ’198 patent claims was well-understood, routine, and conventional as of the priority dates of the ’198 patent. For example, without limitation, the following limitations and/or concepts were well-understood, routine, and conventional—both as individual concepts and in an ordered combination in the claim—as of the priority dates of the ’198 patent:

- online user interface device
- online activity

- set-top box
- method of dealing with online activity of a first user having a first set-top box and a first online user interface device
- receiving at a computer system a notification,
- wherein the notification: (i) includes or references a first set-top box identifier
- television advertisement presented using the first set-top box
- set-top box identifier
- wherein the notification . . . (ii) results from and signifies a first television advertisement presented using the first set-top box that corresponds to the first set-top box identifier;
- using the notification, automatically with the computer system causing a first action to be taken
- a first action to be taken with respect to online activity through the first online user interface device subsequent to presentation of the first television advertisement
- online user interface device
- causing a first action to be taken with respect to online activity through the first online user interface device using the notification, automatically with the computer system causing a first action to be taken with respect to online activity through the first online user interface device subsequent to presentation of the first television advertisement, which first online user interface device corresponds, at a time of the first action, to a first online user interface device identifier
- personally identifiable information

- wherein the first online user interface device identifier and the first set top box identifier are associated without using personally identifiable information pertaining to a user of the set-top box that corresponds to the first set-top box identifier.
- IP address
- first online user interface device identifier includes a first online access IP address
- first set-top box identifier is associated with the first online user interface device identifier,
- first set-top box identifier is associated with the first online user interface device identifier, further, according to a time and date when the first online access IP address was used for online activity via the first online user interface device,
- access IP addresses
- which association uses a database of set-top box identifiers, online access IP addresses, and corresponding times and dates.
- electronic storage accessible to the computer system comprising a database linking electronic indicia
- electronic indicia indicating the action [in part (b)]
- electronic indicia indicating the presented television advertisement.
- action in part (b) includes causing a selected online advertisement to be directed to the online user interface device
- causing recording that a select online activity occurred subsequent to presentation of the television advertisement,

- which online activity was tracked from the online user interface device
- set-top box identifier includes a tag or a cookie on the set-top box
- online user interface device identifier includes a tag or cookie on the online user interface device
- the notification in part (a) further includes data collected from user commands executed during presentation of the television advertisement

Defendants further reserve their right to submit and rely upon expert testimony in support of its arguments regarding patent ineligibility.

IV. INVALIDITY CHARTS

Invalidity charts, as required pursuant to the Scheduling Order, are attached to these invalidity contentions as Exhibits A-F. These invalidity charts identify where in the prior art references each element of the Asserted Claim is found. While each element of each asserted claim may be found in each item of prior art in multiple locations, the attached charts provide examples of citations sufficient to identify at least one such location where each claim limitation is found in each item of prior art. Each item of prior art, however, discloses each claim limitation as a whole and specific citations are only exemplary. Accordingly, Defendants and their expert(s) may rely on uncited portions of the prior art references as the citations must be interpreted in light of the entire disclosure of each reference.

In addition, because persons of skill in the art generally would appreciate an item of prior art in the context of other publications, literature, products, and understanding, Defendants and their expert(s) may rely on other publications and expert testimony as aids in understanding and interpreting the cited portions, for providing context to the cited portions, and as additional evidence that the prior art discloses a claimed feature. Defendants may establish what was known

to a person having ordinary skill in the art through other publications, products, and/or testimony, and reserve their right to rely on cited and uncited portions of the prior art references, other publications, literature, products, understanding, and/or testimony to establish that a person of skill in the art would have been motivated to combine the references rendering the claims obvious.

Defendants may modify, amend, and/or change their interpretation of the prior art based on additional analysis by Defendants' expert(s), and/or based on other circumstances that may affect the meaning or application of the claims, including positions AlmondNet or its expert(s) may take.

The references discussed in the claim charts in Exhibits A-F, or elsewhere identified, may disclose the elements of the Asserted Claims explicitly and/or inherently, and/or they may be relied upon to show the state of the art in the relevant timeframe. The suggested exemplary obviousness combinations are provided in the alternative to Defendants' anticipation contentions and are not to be construed to suggest that any reference included in the combinations is not itself anticipatory.

V. ADDITIONAL PRIOR ART

In addition to the prior art references charted, Exhibit G, which is incorporated herein in its entirety, identifies additional prior art references that disclose or describe the general state of the art and knowledge of one skilled in the art at the time of the purported inventions and the filings of the Asserted Patents. These references (without limitation) may be used to show the state of the art and/or may be used as supporting references in an obviousness combination.

Defendants also incorporate here by reference, whether or not cited in Exhibits A-F, all prior art cited in the Asserted Patents and all prior art cited in the prosecution histories of the Asserted Patents, any prior art cited in any PTAB proceedings, and any foreign counterparts, and any prior art identified by any party in any litigation or administrative proceeding related to the Asserted Patents or any related patents, including the Prior and Pending Actions.

VI. SYSTEMS SUBJECT TO FURTHER DISCOVERY

Defendants list below systems that are subject to ongoing investigation and pending discovery. On information and belief, these systems anticipate and/or render obvious the Asserted Claims of the Asserted Patents, whether combined with the knowledge of a person having ordinary skill in the art alone, or in combination with one or more of another one of these systems or other references identified in these invalidity contentions. Defendants intend to pursue discovery in relation to these and other related systems and expect to amend or supplement these invalidity contentions with information to be provided by third parties.

Presently known systems subject to further discovery (which individually and/or collectively invalidate the Asserted Claims in conjunction with other references) include:

1. AdForce
2. DoubleClick
3. Engage
4. Pro-Market
5. Revenue Science
6. Tacoda
7. Jambo
8. TiVo
9. Google TV Ad
10. Atlas solutions
11. Broadsign Reach
12. Accipiter Ad Manager
13. Aptex
14. Firefly

15. Infoseek Ultramatch

16. Starpoint

17. FastClick

18. Open AdStream

19. Real Media

VII. DOCUMENT PRODUCTION

Defendants are concurrently producing related prior art documents identified in these invalidity contentions, to the extent not already produced.

TABLE OF EXHIBITS

Exhibits	Description
A	Invalidity Charts for the '582 patent
B	Invalidity Charts for the '822 patent
C	Invalidity Charts for the '389 patent
D	Invalidity Charts for the '878 patent
E	Invalidity Charts for the '164 patent
F	Invalidity Charts for the '398 patent
G	Additional Prior Art Including Art Reflecting the General State of the Art

Dated: April 7, 2022

By: /s/ Elizabeth L. Brann

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CERTIFICATE OF SERVICE

The undersigned certifies that on April 7, 2022, a true and correct copy of the foregoing document and accompanying exhibits were served via electronic mail to counsel of record for all parties.

By: /s/ Elizabeth L. Brann
Elizabeth L. Brann