IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
TEXARKANA DIVISION

FALL LINE PATENTS, LLC, Plaintiff, v. 7-ELEVEN, INC., Defendant.	Civil Action No. 5:24-cv-00167-RWS **(Consolidated Lead Case)** **JURY TRIAL DEMANDED**
FALL LINE PATENTS, LLC, Plaintiff, v. ALDI INC. and ALDI (TEXAS) L.L.C., Defendants.	Civil Action No. 5:24-cv-00172-RWS **(Member Case)** **JURY TRIAL DEMANDED**

DEFENDANTS' INVALIDITY CONTENTIONS

I. INTRODUCTION

Pursuant to the Court's Scheduling Order, Defendants ALDI Inc. and ALDI (TEXAS) L.L.C. (collectively, "ALDI" or "Defendants") serve their Disclosures under Local Patent Rule 3-3 on Plaintiff Fall Line Patents, LLC's ("Fall Line" or "Plaintiff"). These Invalidity Contentions relate to claim 7 (the "Asserted Claim") of United States Patent No. 9,454,748 ("the '748 Patent").

II. RESERVATIONS

Defendants' Preliminary Invalidity Contentions reflect present knowledge and contentions, and Defendants reserve all rights to modify and supplement these contentions without prejudice.

Fall Line Ex. 2011
Maplebear v. Fall Line
IPR2025-00958

Defendants further reserve all rights to rely on witness testimony to supplement these Invalidity Contentions, where appropriate. Additionally, to the extent an accused product or feature comprises or arises from prior art, Defendants reserve the right to contend, without admitting purported infringement, that the ’748 Patent is anticipated and/or made obvious in light of that prior art.

Defendants reserve the right to amend these contentions based upon the Court’s claim construction. Defendants’ Invalidity Contentions are not, and should not been seen as, admissions or adoptions as to any particular claim scope or construction, or as any admission that any particular element is met in any particular way. Defendants object to any attempt to imply claim constructions from any identification or description of potential prior art.

Defendants additionally reserve the right to amend its Contentions if Fall Line later provides any information including any further Infringement Contentions, or if Fall Line amends or alters its Infringement Contentions in any way. Further, these Invalidity Contentions are based on information obtained by Defendants to date. Discovery in this case is on-going. In particular, fact discovery is not complete, the Asserted Claim has not been construed, and expert discovery has not begun. Defendants intend to seek discovery from Fall Line and third parties regarding public use and/or the on-sale bar under pre-AIA 35 U.S.C. § 102, additional prior art under pre-AIA 35 U.S.C. §§ 102 and 103, applicant’s failure to comply with pre-AIA 35 U.S.C. §§ 112 and 101, and/or other grounds of invalidity. Based on discovery, Defendants may identify additional prior art and invalidity arguments, and the Court’s construction of one or more terms from the Asserted Claim may require that Defendants supplement or amend these Contentions. Accordingly, Defendants reserve the right to revise and/or supplement these Contentions as this case proceeds. Moreover, Defendants reserve the right to supplement and/or amend these

Contentions based on any findings as to the priority date of any Asserted Claim, and/or positions that Fall Line or its expert witnesses may take concerning claim interpretation, infringement, and/or invalidity issues.

Prior art not included in these Contentions, whether known or unknown to Defendants, may become relevant. In particular, Defendants are currently unaware of the extent, if any, to which Fall Line will contend that limitations of the Asserted Claim are not disclosed in the prior art that Defendants identified, or will contend that any of the identified references do not qualify as prior art under pre-AIA 35 U.S.C. § 102. The identification of any patents and/or patent publications as prior art shall be deemed to refer to the application that was submitted for the same and to include identification of any foreign counterpart patents and applications as well as international applications. To the extent that such an issue arises, Defendants reserve the right to identify additional teachings in the same references or in other references that anticipate or would have rendered obvious the addition of the allegedly missing limitation to the apparatus, system, or method.

Defendants' claim charts (Exhibits 1-36) submitted as part of these Preliminary Invalidity Contentions cite to particular teachings and disclosures of the prior art as applied to features of the Asserted Claim. Persons having ordinary skill in the art, however, may view an item of prior art generally in the context of other publications, literature, products, and understanding. Accordingly, the cited portions are only examples, and Defendants reserve the right to rely on uncited portions of the prior art references and on other publications and expert testimony as aids in understanding and interpreting the cited portions, as providing context thereto, and as additional evidence that a claim limitation is known or disclosed. Where Defendants cite to a particular figure in a reference, the citation should be understood to encompass the caption and description of the figure and any

text in the reference relating to the figure. Similarly, where Defendants cite to particular text referring to a figure, the citation should be understood to include the figure and caption as well. Defendants further reserve the right to rely on uncited portions of the prior art references, other publications, and testimony to establish bases for combinations of certain cited references that render the Asserted Claim obvious. Further, for any combination, Defendants reserve the right to rely additionally on information generally known to those skilled in the art and/or common sense.

Defendants' Preliminary Invalidity Contentions may also rely upon Fall Line's improper assertions of infringement and improper applications of the Asserted Claim, but Defendants do not agree with those applications and deny infringement.

Nothing in these disclosures shall be construed as a waiver of any rights or objections that are otherwise available to Defendants.

III. INVALIDITY CONTENTIONS

In these Invalidity Contentions, Defendants: (i) identify currently known items of prior art that anticipate, render obvious, or otherwise invalidate the Asserted Claim under pre-AIA 35 U.S.C. § 102 and/or § 103; (ii) specify whether each such item of prior art anticipates and/or renders obvious the Asserted Claim; (iii) submit charts for illustrative prior art references identifying where each limitation of the Asserted Claim is disclosed or rendered obvious by the prior art; (iv) identify combinations and illustrative reasons to combine prior art references where a combination of prior art references renders the Asserted Claim obvious, (v) identify grounds for invalidating the Asserted Claim based on indefiniteness, enablement, and/or written description under 35 U.S.C. § 112; and (vi) identify the grounds for invalidating the Asserted Claim under 35 U.S.C. § 101 for failure to claim patent eligible subject matter.

The references discussed in the claim charts may disclose elements of the Asserted Claim explicitly and/or inherently, and/or they may be relied upon to show the state of the art in the relevant time frame. The suggested obviousness combinations are sometimes provided in the alternative to Defendants' anticipation contentions and are not meant to suggest that any reference included in the combinations is not by itself anticipatory.

A. Identification of Prior Art Under §§ 102 and 103

Defendants list below the currently known prior art that anticipates or renders obvious claim 7 of the '748 Patent under 35 U.S.C. § 102 and/or § 103 (pre-AIA) expressly or inherently.

Each listed patent and patent publication became prior art at least as early as the dates provided on the face of the document. Each listed prior art system became prior art at least as early as the date of its first public use. Defendants reserve the right to rely upon earlier dates of publication or public availability to the extent such information is uncovered during discovery.

i. United States Patent/Patent Publication References

Patent or Patent Publication Number	Date of Issue/Publication (Filing Date)
U.S. Patent No. 6,873,688 ("Aarnio")	Mar. 29, 2005 (Oct. 2, 2000)
U.S. Patent Appl. Pub. No. 2002/0143469 ("Alexander")	Oct. 3, 2002 (Mar. 30, 2001)
U.S. Patent No. 7,376,640 ("Anderson")	May 20, 2008 (Nov. 14, 2000)
U.S. Patent No. 7,703,611 ("Appelman")	Apr. 27, 2010 (Apr. 26, 2001)
U.S. Patent No. 6,961,586 ("Barbosa")	Sep. 22, 2009 (Sep. 18, 2000)
U.S. Patent No. 9,858,595 ("Barnes 595")	Jan. 2, 2018 (May 23, 2002)
U.S. Patent Appl. Pub. No. 2003/0220835 ("Barnes 835")	Nov. 27, 2003 (May 23, 2002)
U.S. Patent Appl. Pub. No. 2005/0136949 ("Barnes 949")	Jun. 23, 2005 (May 23, 2002)
U.S. Patent No. 8,135,609 ("Britt")	Mar. 13, 2012 (Jan. 8, 2002)
U.S. Patent Appl. Pub. No. 2001/0052009 ("Desai")	Dec. 13, 2001 (Mar. 30, 1998)
U.S. Patent No. 6026375 ("Hall")	Feb. 15, 2000 (Dec. 5, 1997)
U.S. Patent No 6,202,023 ("Hancock")	Mar. 13, 2001 (Aug. 22, 1996)
U.S. Patent No. 6,154,745 ("Kari")	Nov. 28, 2000 (Dec. 23, 1997)
U.S. Patent Appl. Pub. No. 2002/0111819 ("Li")	Aug. 15, 2002 (Dec. 7, 2000)
U.S. Patent Appl. Pub. No. 2002/0087522 ("MacGregor")	Jul. 4, 2002 (Dec. 29, 2000)
U.S. Patent Appl. Pub. No. 2002/0082775 ("Meadows")	Nov.7, 2019 (Aug. 7, 2000)
U.S. Patent No. 7,181,225 ("Moton")	Feb. 20, 2007 (Dec. 19, 2000)

Patent or Patent Publication Number	Date of Issue/Publication (Filing Date)
U.S. Patent No. 6,687,504 (“Raith”)	Feb. 3, 2004 (Jul. 28, 2000)
U.S. Patent Appl. Pub. No. 2002/0091577(“Parry”)	Jul. 11, 2002 (Jan. 8, 2001)
U.S. Patent Appl. Pub. No. 2002/0128898 (“Smith”)	Sep. 12, 2002 (Feb. 8, 2001)
U.S. Patent Appl. Pub. No. 2003/0132298 (“Swartz”)	Jul 17, 2003 (Nov. 21, 2001)
U.S. Patent Appl. Pub. No. 2002/0107726 (“Torrance”)	Aug. 8, 2002 (Dec. 22, 2000)
U.S. Patent No. 5,978,770 (“Waytena”)	Nov. 2, 1999 (Apr. 24, 1997)
U.S. Patent No. 5,699,244 (“Clark”)	Dec. 16, 1997 (Jun. 16, 1995)
U.S. Patent No. 5,991,771 (“Falls”)	Nov. 23, 1999 (Jul. 18, 1996)
U.S. Patent No. 6,816,085 (“Haynes”)	Nov. 9, 2004 (Nov. 17, 2000)
U.S. Patent No. 6,418,308 (“Heinonen”)	Jul. 9, 2002 (Aug. 26, 1997)
U.S. Patent No. 7,783,500 (“Meyer”)	Aug. 24, 2010 (Jul. 19, 2000)
U.S. Patent Appl. Pub. No. 2001/0039489 (“Ford”)	Nov. 8, 2001 (May 23, 2001)
U.S. Patent Appl. Pub. No. 2002/0133406(“Kujirai”)	Sep. 19, 2002 (Sep. 14, 2001)
U.S. Patent No. 9,785,895/ U.S. Provisional Appl. No. 60/374,380 (“Hawkins”)	Oct. 10, 2017 (Apr. 22, 2002)
U.S. Patent No. 6,704,396 (“Parolkar”)	Mar. 9, 2004 (Feb. 27, 2002)
U.S. Patent No. 6,381,535(“Durocher”)	Apr. 30, 2002 (Apr. 8, 1997)
U.S. Patent Appl. Pub. No. 20020147850 (“Richards”)	Oct. 10, 2002 (Apr. 5, 2001)
U.S. Patent No. 6,453,329 (“Dodgen”)	Sep. 17, 2002 (Aug. 8, 2000)
U.S. Patent No. 6,944,447 (“Portman”)	Sep. 13, 2005 (Sep. 4, 2001)
U.S. Patent No. 8,650,064 (“Morsberger”)	Feb. 11, 2014 (Oct. 31, 2000)
U.S. Patent No. 5,528,248 (“Steiner”)	Jun. 18, 1996 (Aug. 19, 1994)
U.S. Patent No. 6,205,478 (“Sugano”)	Mar. 20, 2001 (Dec. 30, 1998)
U.S. Patent No. 6,154,754 (“Hsu”)	Nov. 20, 2000 (Sep. 25, 1997)
U.S. Patent No. 6,421,608 (“Motoyama”)	Jul 16, 2002 (Jul. 12, 2000)
U.S. Patent No. 8,712,838 (“Dietz”)	Apr. 29, 2014 (Sep. 30, 1999)
U.S. Patent No. 7,174,308 (“Bergman”)	Feb. 6, 2007 (Aug. 21, 2001)
U.S. Patent No. 6,091,956 (“Hollenberg”)	Jul. 18, 2000 (Jun. 12, 1997)
U.S. Patent No. 6,435,406 (“Pentel”)	Aug. 20, 2002 (Oct. 6, 2000)
U.S. Patent No. 6,446,005 (“Bingeman”)	Sep. 3, 2002 (Aug. 13, 1999)
U.S. Patent No. 6,587,835 (“Treyz”)	Jul. 1, 2003 (Feb. 9, 2000)
U.S. Patent No. 6,681,109 (“Leifer”)	Jan. 20, 2004 (May 8, 2000)
U.S. Patent No. 6,785,539 (“Hale”)	Aug. 31, 2004 (Dec. 5, 2001)
U.S. Patent No. 6,813,501 (“Kinnunen”)	Nov. 2, 2004 (Feb. 27, 2001)
U.S. Patent No. 6,813,608 (“Baranowski”)	Nov. 2, 2004 (Mar. 14, 2000)
U.S. Patent No. 6,920,431 (“Showghi I”)	Jul 19, 2005 (Apr. 27, 2000)
U.S. Pat. Appl. Pub. No. 2002/0026459 (“Fernandez”)	Feb. 28, 2002 (Jun. 29, 2001)
U.S. Pat. Appl. Pub. No. 2003/0163514 (“Waldschmidt”)	Aug. 28, 2003 (Feb. 22, 2002)
U.S. Pat. Appl. Pub. No. 2003/0204436 (“Flender”)	Oct. 30, 2003 (Apr. 30, 2002)
U.S. Pat. Appl. Pub. No. 2004/0002301 (“Ross”)	Jan. 1, 2004 (Jul. 1, 2002)
U.S. Pat. Appl. Pub. No. 2004/0044559 (“Malik”)	Mar. 4, 2004 (Aug. 29, 2002)
U.S. Pat. Appl. Pub. No. 2003/0105814 (“Kamiya”)	Jun. 5, 2003 (Dec. 5, 2001)

Patent or Patent Publication Number	Date of Issue/Publication (Filing Date)
U.S. Pat. Appl. Pub. No. 2003/0067464 ("Gathman I")	Apr. 10, 2003 (Oct. 4, 2001)
U.S. Pat. Appl. Pub. No. 2003/0069762 ("Gathman762")	Apr. 10, 2003 (Oct. 4, 2001)
U.S. Pat. Appl. Pub. No. 2003/0069763 ("Gathman763")	Apr. 10, 2003 (Oct. 4, 2001)
U.S. Pat. Appl. Pub. No. 2003/0069764 ("Gathman764")	Apr. 10, 2003 (Oct. 4, 2001)
U.S. Pat. Appl. Pub. No. 2003/0069789 ("Gathman789")	Apr. 10, 2003 (Oct. 4, 2001)
U.S. Pat. Appl. Pub. No. 2003/0069810 ("Gathman810")	Apr. 10, 2003 (Oct. 4, 2001)
U.S. Pat. Appl. Pub. No. 2003/0069829 ("Gathman829")	Apr. 10, 2003 (Oct. 4, 2001)
U.S. Pat. Appl. Pub. No. 2003/0050854 ("Showghi II")	Mar. 13, 2003 (Apr. 27, 2000)
U.S. Pat. Appl. Pub. No. 2003/0014323 ("Scheer")	Jan. 16, 2003 (Sep. 28, 2001)
U.S. Pat. Appl. Pub. No. 2004/0044578 ("Kim")	Mar. 4, 2004 (Aug. 29, 2002)
U.S. Patent No. 6,381,603 ("Chan")	Apr. 30, 2002 (Feb. 22, 1999)
U.S. Patent No. 6,332,127 ("Bandera")	Dec. 18, 2001 (Jan. 28, 1999)
U.S. Patent No. 6,356,905 ("Gershman")	Mar. 12, 2002 (Mar. 5, 1999)
U.S. Patent No. 6,380,928 ("Todd")	Apr. 30, 2002 (May 23, 2000)
U.S. Pat. Appl. Pub. No. 2002/0038165 ("McHale")	Mar. 28, 2002 (Nov. 6, 2001)
U.S. Pat. Appl. Pub. No. 2002/0115435 ("Soh")	Aug. 22, 2002 (Jun. 21, 2001)
U.S. Pat. Appl. Pub. No. 2003/0182209 ("Ge")	Sep. 25, 2003 (Mar. 25, 2002)
U.S. Pat. Appl. Pub. No. 2004/0054592 ("Hernblad")	Mar. 18, 2004 (Sep. 13, 2002)
U.S. Patent No. 7,376,584 ("Weixel")	May 20, 2008 (Jul. 31, 2001)
U.S. Patent No. 5,504,589 ("Montague")	Apr. 2, 1996 (Dec. 27, 1993)
U.S. Pat. Appl. Pub. No. 2002/0133418 ("Hammond")	Sep. 19, 2002 (Mar. 16, 2001)
U.S. Patent No. 7,253,817 ("Plantec")	Aug. 7, 2007 (Dec. 29, 1999)
U.S. Pat. Appl. Pub. No. 2002/0069192 ("Aegerter")	Jun. 6, 2002 (Dec. 4, 2001)
U.S. Pat. Appl. Pub. No. 2002/0007303 ("Brookler")	Jan. 17, 2002 (Apr. 30, 2001)
U.S. Patent No. 5241625 ("Epard")	Aug. 31, 1993 (Nov. 27, 1990)
U.S. Patent No. 6,477,504 ("Hamlin)	Nov. 5, 2002 (Mar. 2, 1998)
U.S. Patent No. 6546425 ("Hanson")	Apr. 8, 2003 (Oct. 9, 1998)
U.S. Patent No. 6006034 ("Heath")	Dec. 21, 1999 (Sep. 5, 1996)
U.S. Patent No. 7003767 ("Larkin")	Feb. 21, 2006 (Oct. 2, 2001)
U.S. Patent No. 7171661 ("Pinera")	Jan. 20, 2007 (Oct. 19, 2000)

ii. Prior Art Foreign Patents and Printed Publications

Patent or Patent Publication Number	Date of Publication
WO 2001/042873 (Chen")	June 14, 2001
WO 2001/24078 ("Aarnio PCT")	April 5, 2001
KR 10-0720407 ("Kwon")	May 22, 2007
EP 1,115,073 ("Park")	November 7, 2001
JP 2002-056149 ("Sugimoto")	February 20, 2002

Patent or Patent Publication Number	Date of Publication
WO 2000/31666 (“Short”)	June 2, 2000
WO 2001/82783 (“Mault”)	November 8, 2001
WO 2000/49530 (“Parasnis”)	August 24, 2000
WO 2002/17567 (“Spaargaren”)	February 28, 2002
WO 2002/024569 (“Kenny”)	Mar. 28, 2002
WO 2000/046959 (“Nordenstam”)	Aug. 10, 2000
JP 2001-283021 (“Minoru”)	Oct. 12, 2001
JP 2002-245368 (“Momen”)	Aug. 30, 2002

Publication Title	Date of Publication
Methods for the Design and Administration of Web-Based Surveys	January 31, 2000
Using While Moving: HCI Issues in Fieldwork Environments	September 1, 2000
Dynamic Geographic Personal Data - New Opportunity and Challenge Introduced by the Location-Aware Mobile Networks	2001
FieldNote: a Handheld Information System for the Field	1999
Fieldnote: extending a GIS into the field	1999
Developing Personal Technology for the Field	1998
Palm software for field service	November 2000
Enhanced Reality Fieldwork: the Context Aware Archeological Assistant	January 1998
Experience-Sampling Tools: a Critical Review	September 15, 2009
Mobility Support for Replicated Real-Time Applications	2002
An Introduction to Computerized Experience Sampling In Psychology	2001
Wireless Ordering & Reservation System (WORS)	2001/2002
A Framework for the Emerging Mobile Commerce Applications	2001
SMART NETWORKS, Developing MLS Location-Based Service Pilot System	April 2002
Spatial Applications Using 4S Technology for Mobile Environment	June 2002
LoL@: designing a location based UMTS application	February 2002
Ad-Me: A Context-Sensitive Advertising System	September 10, 2001
Developing Location-Based Services From A GIS Perspective	September 2001
HTML 4 Unleashed	2000
Zingler, Wireless field data collection	1999

iii. Prior Art Systems

Systems	Public Use Date
Benefon Esc!	1999
ProShot Golf System	May 2002
The Park-Tours, Inc. "Park-Cruiser" System and related systems ("Park-Cruiser")	April 20, 2001
MacroSolve, Inc. Secret Shopper Application	July 11, 2001
Official Pendragon Forms	December 1, 1999
Mobile-Aware City Guide Application	June 1998

Copies of the references identified above are being produced along with these Preliminary Invalidity Contentions. Additionally, certain references above were already known to, and in the possession of, Plaintiff.

Each of the references and systems listed above qualifies as prior art under one or more sections of 35 U.S.C. §§ 102 and/or 103. The invalidating disclosure in each of the listed references and materials is express, implicit, and/or inherent. The references provided herein may also be relied upon to show the state of the art in the relevant time frame. Also, to the extent that any of the references listed above are deemed not to be prior art, they may nevertheless provide evidence of prior or simultaneous invention, thereby supporting the obviousness of the Asserted Claim.

To the extent they constitute prior art, Defendants reserve the right to rely upon any of the following art related to the prior art identified herein: (i) foreign counterparts of the U.S. patents identified; (ii) U.S. counterparts of any foreign patents and foreign patent applications identified; (iii) U.S. and foreign patents and patent applications corresponding to any articles and publications identified; (iv) any products, prior inventions, or publications that relate to any references identified; and (v) any patents, patent applications or publications that relate to any identified system. In addition, the specification and prosecution history of the '748 Patent and related patents and/or applications contain descriptions of, and admissions concerning, the scope of the claims.

Defendants intend to rely upon these descriptions and admissions. Defendants also identify all prior art references cited to, included in, or incorporated by reference in the ’748 Patent and its prosecution history, as well as any statements in either regarding the prior art. Defendants also identify all prior art references cited to, included in, or incorporated by reference in any of the above-identified prior art references. Defendants reserve their right to amend their contentions to include additional prior art references.

B. Background of the State of the Art

The earliest claimed priority date of the Asserted Patent is August 19, 2002. Prior to that alleged priority date, GPS-based mobile-device location technologies and applications were available and widespread. *See, e.g.,* Hall, 5:38-65 (“MCPE 105 preferably includes a receiver that could be used by MLDS 145 to determine the customer’s geographic location. One example of a suitable receiver is one of the types currently used in automobile navigation systems to receive satellite signals from the (Global Positioning System(“GPS”).”); Barnes 949, ¶ [0091] (“Depending on the implementation of the present invention, the location module may determine the absolute and/or relative location of the device. The absolute location may be determined by using a global position satellite (GPS) receiver that is integrated into the device, which can be used to determine the approximate longitude and latitude of the device.”); Waytena, 8:16-21 (“Location 233 specifies the location of the attraction in the park. In one embodiment, this is specified in grid coordinates to some useful level of resolution, such as 10 meters. Other forms of location data may also be used, such as Global Positioning System (GPS) coordinates, and the like”); Mault, 6:15-7:1 (“a position location device (such as a global positioning system) providing a location of the user, and a database accessible by the portable computing device (preferably over the communications network), by which the locations of food retail establishments complying with the user's

requirement can be located, and their location relative to the user can be presented on the display."); Baranowski, 9:28-34; Swartz, ¶ [0099]. Indeed, the '748 Patent itself acknowledges that handheld computers of that time might include GPS. '748 Patent at 10:55-58 ("As the mystery shopper enters the parking lot, the shopper will be prompted to enter a store number or location. If the handheld computer is equipped with a GPS receiver, this information could be entered automatically."); Kari, 6:15-19 ("Information on the real-time location of a mobile communication device can be derived to the search terminal from the GPS system or another satellite location system or via the positioning service of a mobile communication network.").

Similarly, establishing location data based on network-based position-location systems was well known at the time of the alleged invention. *See*, *e.g.*, Barnes 949, ¶ [0091] ("Another method of determining the absolute location is through the use of a network-based position-location system, which may use, for example, triangulation from cell towers to locate the device. Network-based location systems are manufactured by TruePosition Inc. in King of Prussia, Pa., or Forest, Va.-based Grayson Wireless, a division of Allen Telecom Inc. in Beechwood, Ohio."); Showghi II, ¶ [0063] ("cell phone infrastructure has been required by law (the FCC E911 mandate) to provide a means by which portable wireless devices can be located for emergency purposes, and optionally for commercial purposes. The implementation of this System has taken many paths, including GPS (global positioning system) receivers and cell tower triangulation schemes. It is contemplated that as the automatic location services mature, it will be possible to use a single contact number or Web address and automatically locate the venue of the patron."); Kari, 6:15-19 ("Information on the real-time location of a mobile communication device can be derived to the search terminal from the GPS system or another satellite location system or via the positioning service of a mobile communication network.").

The ’748 Patent also acknowledges that several of the claimed elements are not novel. For example, the ’748 Patent explains that it was known to design a questionnaire customized for a particular location. ’748 Patent at 3:11-20. The ’748 Patent also explains that it was known to transfer via a network any responses collected in real-time to a central computer and to make available via the Internet any responses transferred to the central computer. *Id.* at 3:21-4:17.

Defendants incorporate by reference herein all discussion of the state of the art referenced in its Invalidity Contentions, served contemporaneously herewith, including the accompanying claim charts (Exhibits 1-36), as well as all discussion of the state of the art in the prior art identified therein.

C. Anticipation and Obviousness Under §§ 102 and 103

i. Anticipating References

Defendants identify the following references as anticipating claim 7 of the ’748 Patent under 35 U.S.C. § 102, in conjunction with the accompanying claim charts in Exhibits 1-36. The below table of anticipating references is exemplary.

Anticipating Prior Art to Claim 7 of the ’748 Patent	Short Name
U.S. Patent No. 6,873,688	(“Aarnio”)
U.S. Pat. Appl. Pub. No. 2002/0143469	(“Alexander”)
U.S. Patent No. 7,376,640	(“Anderson”)
U.S. Patent No. 7,703,611	(“Appelman”)
U.S. Patent No. 6,961,586	(“Barbosa”)
U.S. Patent No. 9,858,595	(“Barnes 595”)
U.S. Pat. Appl. Pub. No. 2003/0220835	(“Barnes 835”)
U.S. Pat. Appl. Pub. No. 2005/0136949	(“Barnes 949”)
Benefon ESC!	(“Benefon ESC!”)
U.S. Patent No. 8,135,609	(“Britt”)
WO 01/42873	(“Chen”)
U.S. Patent No. 7,194,512	(“Creemer”)
U.S. Pat. Appl. Pub. No. 2001/0052009	(“Desai”)
FieldNote: a Handheld Information System for the Field	(“FieldNote”)
U.S. Patent No. 6,026,375	(“Hall”)

Anticipating Prior Art to Claim 7 of the ’748 Patent	Short Name
U.S. Patent No. 6,202,023	(“Hancock”)
U.S. Prov. Pat. Appl. No. 60/374,380	(“Hawkins”)
U.S. Patent No. 6,154,745	(“Kari”)
U.S. Pat. Appl. Pub. No. 2002/0133406	(“Kujirai”)
KR10-0720407	(“Kwon”)
U.S. Pat. Appl. Pub. No. 2002/0111819	(“Li”)
U.S. Pat. Appl. Pub. No. 2002/0087522	(“MacGregor”)
U.S. Pat. Appl. Pub. No. 2002/0082775	(“Meadows”)
U.S. Patent No. 7,181,225	(“Moton”)
The Park-Tours, Inc. “Park-Cruiser” System	(“ParkCruiser”)
U.S. Patent No. 6,704,396	(“Parolkar”)
U.S. Pat. Appl. Pub. No. 2002/0091577	(“Parry”)
Developing Personal Technology For The Field	(“Pascoe”)
ProShot Golf GPS System	(“ProShot Golf GPS System”)
U.S. Patent No. 6,687,504	(“Raith”)
MacroSolve, Inc. Secret Shopper Application	(“Secret Shopper Application”)
U.S. Pat. Appl. Pub. No. 2002/0128898	(“Smith”)
U.S. Patent No. 6,205,478	(“Sugano”)
U.S. Pat. Appl. Pub. No. 2003/0132298	(“Swartz”)
U.S. Pat. Appl. Pub. No. 2002/0107726	(“Torrance”)
U.S. Patent No. 5,978,770	(“Waytena”)

In the claim charts, Defendants have attempted to identify the most relevant portions of the references. The references may, however, contain additional support for claim limitations. Persons of ordinary skill in the art generally read a prior art reference as a whole and in the context of other publications and literature. Defendants may rely upon uncited portions of the references, other documents, and expert testimony to provide context or to aid in understanding the disclosures of the references. Where Defendants cite to a particular figure in a reference, the citation should be understood to encompass the caption and any corresponding description of the figure in the specification. Conversely, where Defendants cite to particular text referring to a figure, the citation should be understood to include the corresponding figure as well. To the extent any item of prior art cited above is deemed not to disclose, explicitly or inherently, any limitation of claim 7 of the

’748 Patent, Defendants reserve the right to argue that any difference between that prior art and the corresponding patent claim would have been either inherent to the art, or obvious to one of ordinary skill in the art, even if they have not specifically denoted that the art is to be combined with the knowledge of a person of ordinary skill in the art.

Each prior art reference above describing or relating to a prior art system should be understood to discuss the system’s capabilities generally and also to discuss specific examples of specific installations of the particular system. To the extent the prior art references describe various implementations of the same underlying system, that underlying system is a single reference under 35 U.S.C. §§ 102(a) and/or 102(b). The prior art references are evidence of the capabilities of the prior art system, and each chart provided for a prior art system should be understood to incorporate by reference all printed publications describing or relating to that prior art system and all charts provided for those printed publications. In addition, each reference itself also qualifies as prior art on separate grounds as a publication under §§ 102(a) and/or 102(b). Even if the prior art references are not treated as a single prior art reference, at the very least, it would have been obvious to combine the features described in those references.

Further, some or all, of the systems identified herein or identified in the prior art publications and patents will be the subject of continuing investigation and discovery, including on-going and currently uncompleted third-party discovery. Defendants reserve the right to supplement its contentions consistent with the Federal Rules and the Local Patent Rules, in the event that additional information is discovered relating to these systems.

ii. Obviousness Combinations and Rationale(s) to Combine

In addition to the anticipatory references described in these Invalidity Contentions, each item of prior art identified above and described in the charts attached as Exhibits 1-36, either alone

or in combination with other prior art, also renders claim 7 of the ’748 Patent invalid as obvious under 35 U.S.C. § 103. Each identified prior art reference may be combined with: (i) information known to persons skilled in the art at the time of the alleged inventions of the ’748 Patent; (ii) any of the other anticipatory or other prior art identified in these contentions or the accompanying charts; and/or (iii) any of the other prior art identified below. In addition, Defendants incorporate by reference each and every prior art reference of record in the prosecution histories of the ’748 Patent, counterpart patents, and related patent applications, as well as all statements made by the applicant in the prosecution histories of the ’748 Patent, counterpart patents, and related patent applications, including any discussion of prior art or conventional features in any of the specifications of the ’748 Patent, counterpart patents, and related patent applications.

Defendants incorporate by reference the statements and reasoning by the U.S. Patent and Trademark Office during prosecution of the ’748 Patent and any counterpart patents or applications, and any parent or child patents or applications, as to why it would have been obvious to modify or combine prior art references to achieve the limitations of the Asserted Claim or similar claims in any counterparts.

Defendants further incorporate by reference the statements and reasoning by the U.S. Patent and Trademark Office during any *inter partes* review and *ex parte* reexamination proceedings of the ’748 Patent and any counterpart patents or applications, and any parent or child patents or applications, as to why it would have been obvious to modify or combine prior art references to achieve the limitations of the Asserted Claim or similar claims in any counterparts.

Additionally, Defendants identify the following additional prior art, one or more of which could be combined with any of the above Anticipating References, to render claim 7 obvious:

Additional Prior Art for Claim 7 of the ’748 Patent	Short Name
U.S. Pat. Appl. Pub. No. 2002/0007303	(“Brookler”)
U.S. Pat. No. 6,381,603	(“Chan”)
U.S. Pat. No. 5,699,244	(“Clark”)
U.S. Pat. No. 5,991,771	(“Falls”)
U.S. Pat. No. 6,477,504	(“Hamlin”)
U.S. Pat. No. 6546425	(“Hanson”)
U.S. Pat. No. 6006034	(“Heath”)
U.S. Pat. No. 6,813,501	(“Kinnunen”)
U.S. Pat. No. 7003767	(“Larkin ”)
U.S. Pat. Appl. Pub. No. 2004/0044559	(“Malik”)
WO 2001/82783	(“Mault”)
U.S. Pat. No. 6,421,608	(“Motoyama”)
WO 2000/31666	(“Short”)
U.S. Pat. No. 6,205,478	(“Sugano”)
U.S. Pat. No. 6,380,928	(“Todd”)
U.S. Pat. No. 6,587,835	(“Treyz”)
U.S. Pat. No. 6,813,608	(“Baranowski”)
U.S. Pat. No. 7,174,308	(“Bergman”)
U.S. Pat. No. 6,446,005	(“Bingeman”)
U.S. Pat. No. 8,712,838	(“Dietz”)
U.S. Pat. No. 6,816,085	(“Haynes”)
U.S. Pat. No. 6,418,308	(“Heinonen”)
U.S. Pat. No. 6,091,956	(“Hollenberg”)
U.S. Pat. No. 7,783,500	(“Meyer”)
U.S. Pat. No. 6,944,447	(“Portman”)
U.S. Pat. No. 8,650,064	(“Morsberger”)
U.S. Pat. No. 5,528,248	(“Steiner”)
U.S. Pat. No. 6,154,754	(“Hsu”)
U.S. Pat. No. 6,435,406	(“Pentel”)
U.S. Pat. No. 6,681,109	(“Leifer”)
U.S. Pat. No. 6,785,539	(“Hale”)
U.S. Pat. No. 6,920,431	(“Showghi I”)
U.S. Pat. Appl. Pub. No. 2003/0050854	(“Showghi II”)
U.S. Pat. Appl. Pub. No. 2002/0026459	(“Fernandez”)
U.S. Pat. Appl. Pub. No. 2003/0163514	(“Waldschmidt”)
U.S. Pat. Appl. Pub. No. 2003/0204436	(“Flender”)
U.S. Pat. Appl. Pub. No. 2004/0002301	(“Ross”)
U.S. Pat. Appl. Pub. No. 2003/0105814	(“Kamiya”)
U.S. Pat. Appl. Pub. No. 2003/0067464	(“Gathman I”)
U.S. Pat. Appl. Pub. No. 2003/0069762	(“Gathman762”)
U.S. Pat. Appl. Pub. No. 2003/0069763	(“Gathman763”)
U.S. Pat. Appl. Pub. No. 2003/0069764	(“Gathman764”)

Additional Prior Art for Claim 7 of the ’748 Patent	Short Name
U.S. Pat. Appl. Pub. No. 2003/0069789	(“Gathman789”)
U.S. Pat. Appl. Pub. No. 2003/0069810	(“Gathman810”)
U.S. Pat. Appl. Pub. No. 2003/0069829	(“Gathman829”)
U.S. Pat. Appl. Pub. No. 2003/0014323	(“Scheer”)
U.S. Pat. Appl. Pub. No. 2004/0044578	(“Kim”)
U.S. Pat. No. 6,083,353	(“Alexander353”)
U.S. Pat. No. 6,332,127	(“Bandera”)
U.S. Pat. No. 6,356,905	(“Gershman”)
U.S. Pat. Appl. Pub. No. 2002/0038165	(“McHale”)
U.S. Pat. Appl. Pub. No. 2002/0115435	(“Soh”)
U.S. Pat. Appl. Pub. No. 2003/0182209	(“Ge”)
U.S. Pat. Appl. Pub. No. 2004/0054592	(“Hernblad”)
U.S. Pat. No. 7,376,584	(“Weixel”)
U.S. Pat. No. 5,504,589	(“Montague”)
U.S. Pat. Appl. Pub. No. 2002/0133418	(“Hammond”)
U.S. Pat. No. 7,253,817	(“Plantec”)
U.S. Pat. Appl. Pub. No. 2002/0069192	(“Aegerter”)
U.S. Pat. No. 5241625	(“Epard”)
U.S. Pat. No. 7171661	(“Pinera”)
EP 1,115,073	(“EP073”)
JP 2002-056149	(“Sugimoto”)
WO 2000/49530	(“Parasnis”)
WO 2002/17567	(“Spaargaren”)
WO 2002/024569	(“Kenny”)
WO 2000/046959	(“Nordenstam”)
JP 2001-283021	(“Minoru”)
JP 2002-245368	(“Momen”)
Methods for the Design and Administration of Web-Based Surveys	(“Web-Based Surveys”)
Using While Moving: HCI Issues in Fieldwork Environments	(“Using While Moving”)
Dynamic Geographic Personal Data - New Opportunity and Challenge Introduced by the Location-Aware Mobile Networks	(“Dynamic Geographic”)
Fieldnote: extending a GIS into the field	(“FieldNote GIS”)
Developing Personal Technology for the Field	(“Developing Personal Technology”)
Palm software for field service	(“Palm Software”)
Enhanced Reality Fieldwork: the Context Aware Archeological Assistant	(“Enhanced Reality Fieldwork”)
Experience-Sampling Tools: a Critical Review	(“Experience-Sampling Tools”)
Mobility Support for Replicated Real-Time Applications	(“Mobility Support”)

Additional Prior Art for Claim 7 of the ’748 Patent	Short Name
An Introduction to Computerized Experience Sampling In Psychology	(“Computerized Experience Sampling”)
Wireless Ordering & Reservation System (WORS)	(“WORS”)
A Framework for the Emerging Mobile Commerce Applications	(“Mobile Commerce Applications”)
SMART NETWORKS, Developing MLS Location-Based Service Pilot System	(“SMART NETWORKS”)
Spatial Applications Using 4S Technology for Mobile Environment	(“Spatial Applications”)
LoL@: designing a location based UMTS application	(“LoL@”)
Ad-Me: A Context-Sensitive Advertising System	(“Ad-Me”)
Developing Location-Based Services From A GIS Perspective	(“Location-Based Services”)
HTML 4 Unleashed	(“Darnell”)
Zingler, Wireless field data collection	(“Zingkler”)
Official Pendragon Forms	(“Pendragon Forms”
“Mobile-Aware City Guide Application”	(“Mobile-Aware”)

1. Motivations to Combine

The suggested obviousness combinations discussed herein are not to be construed to suggest that any reference included in the combinations is not anticipatory. Further, to the extent Fall Line contends that any of the anticipatory prior art fails to disclose one or more limitations of the ’748 Patent, Defendants reserve the right to identify other prior art references that, when combined with the anticipatory prior art, would render the claims obvious despite an allegedly missing limitation. Defendants will further specify the motivations to combine the prior art, including through reliance on expert testimony, at the appropriate later stage of this lawsuit.

The decision in *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398 (2007), held that patents that are based on new combinations of elements or components already known in a technical field may be found to have been obvious. The Supreme Court rejected a rigid application of the “teaching, suggestion, or motivation [to combine]” test. *Id.* at 415, 419. “In determining whether the subject

matter of a patent claim is obvious, neither the particular motivation nor the avowed purpose of the patentee controls. What matters is the objective reach of the claim." *Id.* at 419. "Under the correct analysis, any need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed." *Id.* at 420. The Supreme Court emphasized the principle that "[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." *Id.* at 416. A key inquiry is whether the "improvement is more than the predictable use of prior art elements according to their established function." *Id.* at 417.

The Court further held that "in many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle." *Id.* at 420. It is sufficient that a combination of elements was "obvious to try" – "When there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense." *Id.* at 421. "In that instance the fact that a combination was obvious to try might show that it was obvious under § 103." *Id.* Finally, the Supreme Court recognized that "[g]ranting patent protection to advances that would occur in the ordinary course without real innovation retards progress and may, in the case of patents combining previously known elements, deprive prior inventions of their value or utility." *Id.* at 419.

The rationale to combine or modify prior art references is significantly stronger when the references seek to solve the same problem, come from the same field, and correspond well together. *See In re Inland Steel Co.*, 265 F.3d 1354, 1362 (Fed. Cir. 2001) (allowing two references to be combined as invalidating art under similar circumstances where the art "focus[ed] on the

same problem ... c[a]me from the same field of art [and] ... the identified problem found in the two references correspond[ed] well").

All of the following rationales recognized in *KSR* support a finding of obviousness with respect to each of the obviousness combinations disclosed herein: (1) combining prior art elements according to known methods to yield predictable results; (2) simple substitution of one known element for another to obtain predictable results; (3) use of a known technique to improve similar devices, methods, or products in the same way; (4) applying a known technique to a known device, method, or product ready for improvement to yield predictable results; (5) "obvious to try," that is, choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success; (6) known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations would have been predictable to one of ordinary skill in the art; and (7) some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention. Certain of these rationales are discussed more specifically below. The fact that other rationales are not discussed more specifically should not be interpreted as an admission or concession that the other rationales do not apply.

Defendants further contend that the prior art identified in these Preliminary Invalidity Contentions is evidence of simultaneous or near-simultaneous independent invention by others of the alleged invention as recited in one or more of the '748 Patent. Defendants reserve the right to rely on the simultaneous or near-simultaneous independent invention by others as further evidence of the obviousness of the '748 Patent.

One of skill in the art would find the combination of the charted references obvious to try, at least in part, because the cited prior art is in the same fields of endeavor. For example, the references relate to the use of a mobile devices and/or computers for the purposes of carrying out a survey (and/or some form or application that requires a response or input from a user) (*e.g.,* Barbosa, Abstract ("Systems for and methods of conducting *field assessments* utilizing *handheld data management devices* are disclosed.); Hancock, Abstract ("A system and method for automatically providing services over a *computer network*, such as the Internet, for users in a *mobile environment* based on their geographic location."; "An application program is installed on the client computer system that *prompts the user to input information*."); Moton, Abstract ("The present invention is a system and method for conducting *survey* using *wireless devices*."); Waytena, 3:11-12, ("A *PCD [wireless personal communication device]* receives *user input* from the patron requesting a *reservation* for a particular attraction.")(emphasis added.)

2. Exemplary Combinations

In addition to the above, the Asserted Claim is rendered obvious under 35 U.S.C. § 103 in view of at least the following exemplary combinations of items of prior art and reasons to combine:

a. Alexander alone or with one or more of Falls, Hanson, Kinnunen, Todd, Malik, and Treyz

As shown in Exhibit 32, Alexander alone anticipates or renders obvious the Asserted Claim.

Additionally, Falls, Hanson, Kinnunen, Todd, Malik, and Treyz also teach various features of the Asserted Claim. For example, Falls, Hanson, and Kinnunen each teaches loose networks, including, for example, cellular telecommunications networks, in which devices may be intermittently connected and in which applications and services may be used. *See, e.g.*, Falls,

Abstract, 1:10-18, 1:30-52, 3:16-35, 5:20-31, 6:52-7:21, 7:53-8:9, 13:60-65, 16:35-43, 37:9-32; Hanson, Title, Abstract, 1:16-38, 2:45-3:34, 7:29-48, 10:66-12:21, 37:9-38:6, FIGs. 1, 2, 2A, 3; Kinnunen, 1:21-29, 8:16-45. Accordingly, it would have been obvious to incorporate the use of loosely-connected network devices in Alexander such that the reach of Alexander's information collection and field assessment system could be expanded to more types of networks and devices.

Additionally, Todd, Malik and Treyz each teaches branching logic in a questionnaire program. For example, Malik teaches surveys "set up in a hierarchical structure wherein the answers that the user makes to one displayed set of questions will determine the branches to other predetermined sets of questions that may then be displayed." *See, e.g.*, Malik, ¶¶ [0004], [0028], FIG. 6. Treyz teaches a shopping application including various questions for the user. Based on the user's responses (e.g., selecting a particular category, responding Yes or No; responding with which list to review, etc.), the application would present different further menus and questions for the user (e.g., list of items to purchase, items corresponding to a selected list, etc.). *See, e.g.*, Treyz, 63:49-67, 66:55-67, FIGS. 22-118. Similarly, Todd teaches that in a questionnaire, "[t]he screens and their associated parameters, such as branching conditions, transmission conditions . . . are read from the EEPROM." Todd, 10:27-49; *see also id.*, 14:66-15:58. Accordingly, it would have been obvious to include a branching logic in Alexander's information collection and field assessment system to allow assessment forms and templates to include more targeted and relevant questions to an assessor based on prior responses (e.g., targeted questions based on a type of life-threatening condition or natural disaster).

b. Barbosa alone or with one or more of Falls, Heath, Kinnunen, Moton, Larkin, Hanson, Brookler, Short, and Hamlin

As shown in Exhibit 1, Barbosa alone anticipates or renders obvious the Asserted Claim.

Additionally, Falls, Heath, Kinnunen, Moton, Larkin, Hanson, Brookler, and Short teach features of the Asserted Claim. For example, Falls, Hanson, and Kinnunen each teaches loose networks, including, for example, cellular telecommunications networks, in which devices may be intermittently connected and in which applications and services may be used. *See, e.g.*, Falls, Abstract, 1:10-18, 1:30-52, 3:16-35, 5:20-31, 6:52-7:21, 7:53-8:9, 13:60-65, 16:35-43, 37:9-32; Hanson, Title, Abstract, 1:16-38, 2:45-3:34, 7:29-48, 10:66-12:21, 37:9-38:6, FIGs. 1, 2, 2A, 3; Kinnunen, 1:21-29, 8:16-45. Accordingly, it would have been obvious to incorporate the use of loosely-connected network devices in Barbosa such that the reach of Barbosa's system could be expanded to more types of networks and devices.

Heath, Moton, and Larkin each describes automatic transfer of questionnaires and questionnaire responses. Heath describes dynamically and automatically upgrading programs so that clients have the latest versions, and using temporal or event-based triggers to automatically transfer updated application code from a server. *See*, *e.g.*, Heath, 1:1-26, 1:34-2:61, 4:27-5:67, 7:5-8:13, FIGs. 3A, 6A, 6B, Claims 19, 55, 67. Moton describes automatically transferring surveys to wireless user devices and automatically transmitting responses from the devices. *See*, *e.g.*, Moton, 5:39-55, 6:50-7:3, 7:22-31, FIG. 2. Larkin describes installation of new software version using "push" methods, in which the server automatically installs updates to client devices. *See*, *e.g.*, Larkin, Abstract, 1:53-58, 2:61-3:12, 5:21-38, 6:46-8:62, Figs. 3, 5. It would have been obvious to automatically download the questionnaire in Barbosa to the user device so that the questionnaire could be presented at the right time (e.g., when the user arrives at a job site and before a task is about to begin). *See*, *e.g.*, Barbosa, 5:52-6:27, 7:23-8:3, 11:63-12:32, 12:45-13:5. Further, it would have been obvious to modify Barbosa's process of transferring an executable questionnaire through a network in view of either Barbosa's automatic data synchronization features, Falls's

automatic software application synchronization, Heath's automatic program upgrades, Larkin's automatic software installations and/or Moton's automatic survey transfers, to predictably and beneficially result in a system that automatically transfers the executable questionnaire.

Additionally, Short and Brookler each teaches making questionnaire responses available via the Internet. Short describes collecting user responses to questions, storing that information at a central database, and providing that information for review over the Internet. *See*, *e.g.*, Short, Abstract, 3:14-4:14, 5:14-6:18, 23:17-27, 26:12-17, 27:7-13, FIGs. 1, 18-28. Brookler describes publishing survey results for review and analysis. *See*, *e.g.*, Brookler, Abstract, ¶¶ [0003], [0009]-[0013], [0033], [0052], [0055]-[0056], [0063]-[0065], [0073], FIGs. 1, 2, 5. Accordingly, it would have been obvious to make Barbosa's collected questionnaire responses available via the Internet so that the questionnaire responses are available to assessors for review and analysis using remotely-connected devices. And Hamlin teaches designing a questionnaire including at least one question said questionnaire customized for a particular location having branching logic on a first computer platform. For example, Hamlin describes a mechanism to create surveys (e.g., via JavaScript/Applets) through which clients may specify questions, possible responses, and response-question branching. Hamlin, Abstract, 2:55-3:2, 5:40-9:28, 11:55-67, 14:40-15:33, FIGs. 3-6.

c. Britt alone or with one or more of Falls, Hanson, Kinnunen, Todd, Malik, Treyz, Heath, Moton, Larkin, Short, and Brookler

As shown in Exhibit 10, Britt alone anticipates or renders obvious the Asserted Claim.

Additionally, Falls, Hanson, Kinnunen, Todd, Malik, Treyz, Heath, Moton, Larkin, Short, and Brookler teach features of the Asserted Claim. For example, Falls, Hanson, and Kinnunen each teaches loose networks, including, for example, cellular telecommunications networks, in which devices may be intermittently connected and in which applications and services may be

used. *See, e.g.*, Falls, Abstract, 1:10-18, 1:30-52, 3:16-35, 5:20-31, 6:52-7:21, 7:53-8:9, 13:60-65, 16:35-43, 37:9-32; Hanson, Title, Abstract, 1:16-38, 2:45-3:34, 7:29-48, 10:66-12:21, 37:9-38:6, FIGs. 1, 2, 2A, 3; Kinnunen, 1:21-29, 8:16-45. Accordingly, it would have been obvious to incorporate the use of loosely-connected network devices in Britt such that the reach of Britt's system could be expanded to more types of networks and devices.

Additionally, Todd, Malik and Treyz each teaches branching logic in a questionnaire program. For example, Malik teaches surveys "set up in a hierarchical structure wherein the answers that the user makes to one displayed set of questions will determine the branches to other predetermined sets of questions that may then be displayed." *See*, *e.g.*, Malik, ¶¶ [0004], [0028], FIG. 6. Todd teaches a shopping application including various questions for the user. Based on the user's responses (e.g., selecting a particular category, responding Yes or No; responding with which list to review, etc.), the application would present different further menus and questions for the user (e.g., list of items to purchase, items corresponding to a selected list, etc.). *See*, *e.g.*, Treyz, 63:49-67, 66:55-67, FIGS. 22-118. Similarly, Todd teaches that in a questionnaire, "[t]he screens and their associated parameters, such as branching conditions, transmission conditions . . . are read from the EEPROM." Todd, 10:27-49; *see also id.*, 14:66-15:58. Accordingly, it would have been obvious to include a branching logic in Britt's survey system to include more targeted and relevant questions to an assessor based on prior responses (e.g., targeted questions based a user having one or more selected characteristics).

Heath, Moton, and Larkin each describes automatic transfer of questionnaires and questionnaire responses. Heath describes dynamically and automatically upgrading programs so that clients have the latest versions, and using temporal or event-based triggers to automatically transfer updated application code from a server. *See*, *e.g.*, Heath, 1:1-26, 1:34-2:61, 4:27-5:67, 7:5-

8:13, FIGs. 3A, 6A, 6B, Claims 19, 55, 67. Moton describes automatically transferring surveys to wireless user devices and automatically transmitting responses from the devices. *See*, *e.g.*, Moton, 5:39-55, 6:50-7:3, 7:22-31, FIG. 2. Larkin describes installation of new software version using "push" methods, in which the server automatically installs updates to client devices. *See*, *e.g.*, Larkin, Abstract, 1:53-58, 2:61-3:12, 5:21-38, 6:46-8:62, Figs. 3, 5. It would have been obvious to automatically download the survey in Britt to the handheld device so that the questionnaire could be presented at the right time (e.g., when the user is located within specified geographical constraints). *See*, *e.g.*, Britt, 3:27-50, 4:6-13. Further, it would have been obvious to modify Britt's process of transferring a survey through a network in view of either Heath's automatic program upgrades, Larkin's automatic software installations and/or Moton's automatic survey transfers, to predictably and beneficially result in a system that automatically transfers the questionnaire.

Additionally, Short and Brookler each teaches making questionnaire responses available via the Internet. Short describes collecting user responses to questions, storing that information at a central database, and providing that information for review over the Internet. *See*, *e.g.*, Short, Abstract, 3:14-4:14, 5:14-6:18, 23:17-27, 26:12-17, 27:7-13, FIGs. 1, 18-28. Brookler describes publishing survey results for review and analysis. *See*, *e.g.*, Brookler, Abstract, ¶¶ [0003], [0009]-[0013], [0033], [0052], [0055]-[0056], [0063]-[0065], [0073], FIGs. 1, 2, 5. Accordingly, it would have been obvious to make Britt's survey response data available via the Internet such that responses are accessible to others for review and analysis using a remotely-connected device.

d. Chen alone or with one or more of Mault, Clark, Falls, Hanson, and Kinnunen

As shown in Exhibit 13, Chen alone anticipates or renders obvious the Asserted Claim.

Additionally, Mault, Clark, Falls, Hanson, and Kinnunen also teach various features of the Asserted Claim. For example, Mault and Clark each teaches including functionality in a user

device application or program for providing location information to a remote system using GPS components integral to the user's device. *See*, *e.g.*, Mault, Abstract, 5:30-7:10, 8:21-9:10, 12:30-13:6, 15:25-16:30, 19:20-21:18, FIGS. 5, 6, 8, 9; Clark, 12:46-13:42, 14:35-54, FIGs. 51-53, 58. It would have been obvious to include a location question in Chens's survey to allow a marketer to know an individual's location and more specifically target questions, advertising or other marketing-related materials to that individual based on their location. It also would also have been obvious to have used GPS to automatically provide location information in Chen's survey system so that a user device could leverage existing device functionality and alleviate the user from having to manually retrieve and submit location information.

Additionally, Falls, Hanson, and Kinnunen each teaches loose networks, including, for example, cellular telecommunications networks, in which devices may be intermittently connected and in which applications and services may be used. *See, e.g.*, Falls, Abstract, 1:10-18, 1:30-52, 3:16-35, 5:20-31, 6:52-7:21, 7:53-8:9, 13:60-65, 16:35-43, 37:9-32; Hanson, Title, Abstract, 1:16-38, 2:45-3:34, 7:29-48, 10:66-12:21, 37:9-38:6, FIGs. 1, 2, 2A, 3; Kinnunen, 1:21-29, 8:16-45. Accordingly, it would have been obvious to incorporate the use of loosely-connected network devices in Chen so that Chen's electronic survey system could be expanded for use through additional types of networks and by additional devices.

e. Creemer alone or with one or more of Kinnunen, Heath, Larkin, Moton, Clark, Mault, Todd, Malik, and Treyz

As shown in Exhibit 35, Creemer alone anticipates or renders obvious the Asserted Claim.

Additionally, Kinnunen, Heath, Larkin, Clark, Mault, Todd, Malik, and Treyz teach various features of the Asserted Claim. For example, Kinnunen, Heath, and Larkin each teaches automatically downloading applications and programs to a user computing device. *See*, *e.g.*, Kinnunen, 1:10-20, 3:46-52, 9:35-48, 10:40-59, Claim 16; Heath, 1:34-2:61, 4:59-5:67, 6:1-38,

7:33-8:13, FIGs. 3A, 6A, 6B; Larkin, Abstract, 3:24-29, 5:21-38, 7:1-41, 8:1-9:30, FIGs. 2, 3. 6. Moton also describes automatically transferring surveys to wireless user devices and automatically transmitting responses from the devices. *See*, *e.g.*, Moton, 5:39-55, 6:50-7:3, 7:22-31, FIG. 2. It would have been obvious to modify Creemer such that its transfer of the questionnaire to a user device was automatic based on the teachings of Kinnunen, Heath, Moton, and/or Larkin, so that the questionnaire could be presented and used at the right time (e.g., when the user is leaving a restaurant). *See, e.g.*, Creemer, 14:31-48, FIG. 13.

Additionally, Mault and Clark each teaches including functionality in a user device application or program for providing location information to a remote system using GPS components integral to the user's device. *See, e.g.*, Mault, Abstract, 5:30-7:10, 8:21-9:10, 12:30-13:6, 15:25-16:30, 19:20-21:18, FIGS. 5, 6, 8, 9; Clark, 12:46-13:42, 14:35-54, FIGs. 51-53, 58. It would have been obvious to include a location question in Creemer's questionnaire to allow a surveyor (i.e., the entity collecting questionnaire responses) to determine from which establishment (e.g., restaurant) location a particular set of survey responses was received. It also would also have been obvious to have used GPS to automatically provide location information so that a user device could leverage existing device functionality and alleviate the user from having to manually retrieve and submit location information.

Additionally, Todd, Malik and Treyz each teaches branching logic in a questionnaire program. For example, Malik teaches surveys "set up in a hierarchical structure wherein the answers that the user makes to one displayed set of questions will determine the branches to other predetermined sets of questions that may then be displayed." *See*, *e.g.*, Malik, ¶¶ [0004], [0028], FIG. 6. Treyz teaches a shopping application including various questions for the user. Based on the user's responses (e.g., selecting a particular category, responding Yes or No; responding with

which list to review, etc.), the application would present different further menus and questions for the user (e.g., list of items to purchase, items corresponding to a selected list, etc.). *See*, *e.g.*, Treyz, 63:49-67, 66:55-67, FIGS. 22-118. Similarly, Todd teaches that in a questionnaire, "[t]he screens and their associated parameters, such as branching conditions, transmission conditions . . . are read from the EEPROM." Todd, 10:27-49; *see also id.*, 14:66-15:58. Accordingly, it would have been obvious to include a branching logic in Creemer questionnaire to allow a surveyor to provide more targeted and relevant questions to a respondent based on prior responses (e.g., satisfaction with the food or service at a restaurant).

f. FieldNote alone or with one or more of Dietz, Fernandez, Morsberger, Falls, Hanson, Kinnunen, Todd, and Morsberger

As shown in Exhibit 30, FieldNote alone anticipates or renders obvious the Asserted Claim.

Additionally, Dietz, Fernandez, Morsberger, Falls, Hanson, Kinnunen, Todd, and Morsberger. also teach various features of the Asserted Claim. For example, Dietz, Fernandez, and Morsberger each describes surveys and other electronic content that are customized for a particular location. Dietz describes customizing web pages and other content based on a user's particular location. Dietz, Abstract, 2:35-63, 4:34-57, 6:24-56, FIG. 2. Morsberger teaches that a survey provided to a customer or user may be determined based on a location of the store where a purchase was made. Morsberger, 3:5-36, 18:43-62. Fernandez similarly discloses generating location-specific electronic content for a user. Fernandez, Abstract, ¶¶ [0008]-[0011], [0060]-[0062], [0076]-[0078]. Accordingly, it would have been obvious to create location-specific field assessment questionnaires in FieldNote since each field location may be different (e.g., have different environmental conditions, structures, characteristics). Having different questions for different field locations would allow for more concise and focused questions by eliminating ones that may be less relevant for a particular field site.

Additionally, Falls, Hanson, and Kinnunen each teaches loose networks, including, for example, cellular telecommunications networks, in which devices may be intermittently connected and in which applications and services may be used. *See, e.g.*, Falls, Abstract, 1:10-18, 1:30-52, 3:16-35, 5:20-31, 6:52-7:21, 7:53-8:9, 13:60-65, 16:35-43, 37:9-32; Hanson, Title, Abstract, 1:16-38, 2:45-3:34, 7:29-48, 10:66-12:21, 37:9-38:6, FIGs. 1, 2, 2A, 3; Kinnunen, 1:21-29, 8:16-45. Accordingly, it would have been obvious to incorporate the use of loosely-connected network devices in FieldNote so that FieldNote's electronic field assessment system could be expanded for use through additional types of networks and by additional devices. Indeed, FieldNote explains a desire to develop its field assessment system to operate with wireless, intermittently-connected networks. FieldNote, 3-4.

Additionally, Todd and Morsberger each teaches real-time surveying, including real-time collection and transmission of information from a user device to a remote system or server. For example, Todd explains that prior art systems provide for "real time, self-administered, customer satisfaction survey systems, methods, or devices." Todd, 2:40-49. Todd also describes its own survey system as providing remote, real-time or near real time signaling capability. *See id.*, 1:11-20, 4:20-5:34, 7:4-44, 8:25-37, 13:1-59, FIGs. 1, 3, Claims 5-6. Morsberger teaches a survey and review system that allows tabulation of user responses in real-time and for review of transaction records in real-time. *See* Morsberger, 11:63-12:10, 14:31-16:57. Morsberger explains that the real-time nature of the information tabulation allows for online updates to merchants and other parties also in real-time. *Id.* Accordingly, it would have been obvious to modify FieldNote's field assessment application and system for collecting data such that user responses entered through the application may be transmitted to the collecting server in real-time. This would have provided the

benefit of allowing review, analysis, and/or sharing (e.g., among multiple field workers) of field assessment data in real-time.

g. Hancock alone or with one or more of Clark, Mault, Falls, Hanson, Kinnunen, Brookler, and Short

As shown in Exhibit 2, Hancock alone anticipates or renders obvious the Asserted Claim.

Additionally, Clark, Mault, Falls, Hanson, Kinnunen, Brookler, and Short teach features of the Asserted Claim. For example, Mault and Clark each teaches including functionality in a user device application or program for providing location information to a remote system using GPS components integral to the user's device. *See*, *e.g.*, Mault, Abstract, 5:30-7:10, 8:21-9:10, 12:30-13:6, 15:25-16:30, 19:20-21:18, FIGS. 5, 6, 8, 9; Clark, 12:46-13:42, 14:35-54, FIGs. 51-53, 58. It would have been obvious to include a location question in Hancock's program to allow the server collecting responses to retrieve information customized for a particular location. *See*, *e.g.*, Hancock, 3:7-22. It also would also have been obvious to have used GPS to automatically provide location information so that a user device could leverage existing device functionality and alleviate the user from having to manually retrieve and submit location information.

Falls, Hanson, and Kinnunen each teaches loose networks, including, for example, cellular telecommunications networks, in which devices may be intermittently connected and in which applications and services may be used. *See, e.g.*, Falls, Abstract, 1:10-18, 1:30-52, 3:16-35, 5:20-31, 6:52-7:21, 7:53-8:9, 13:60-65, 16:35-43, 37:9-32; Hanson, Title, Abstract, 1:16-38, 2:45-3:34, 7:29-48, 10:66-12:21, 37:9-38:6, FIGs. 1, 2, 2A, 3; Kinnunen, 1:21-29, 8:16-45. Accordingly, it would have been obvious to incorporate the use of loosely-connected network devices in Hancock so that Hancock's program could be expanded for use through additional types of networks and by additional devices.

Additionally, Short and Brookler each teaches making questionnaire responses available via the Internet. Short describes collecting user responses to questions, storing that information at a central database, and providing that information for review over the Internet. *See*, *e.g.*, Short, Abstract, 3:14-4:14, 5:14-6:18, 23:17-27, 26:12-17, 27:7-13, FIGs. 1, 18-28. Brookler describes publishing survey results for review and analysis. *See*, *e.g.*, Brookler, Abstract, ¶¶ [0003], [0009]-[0013], [0033], [0052], [0055]-[0056], [0063]-[0065], [0073], FIGs. 1, 2, 5. Accordingly, it would have been obvious to make Hancock's response data available via the Internet such that responses are accessible to others for review and analysis.

h. Kari alone or with one or more of Clark, Chan, Mault, Falls, Hanson, Kinnunen, Brookler, and Short

As shown in Exhibit 16, Kari alone anticipates or renders obvious the Asserted Claim.

Additionally, Clark, Chan, Mault, Falls, Hanson, Kinnunen, Brooker, and Short teach features of the Asserted Claim. For example, Mault, Chan, and Clark each teaches including functionality in a user device application or program for providing location information to a remote system using GPS components integral to the user's device. *See*, *e.g.*, Mault, Abstract, 5:30-7:10, 8:21-9:10, 12:30-13:6, 15:25-16:30, 19:20-21:18, FIGs. 5, 6, 8, 9; Chan 1:7-9, 3:11-24, 5:21-27, 6:6-23, FIG. 5; Clark, 12:46-13:42, 14:35-54, FIGs. 51-53, 58. It would have been obvious to include a location question in Kari's system to obtain an individual's location and more specifically target questions or other content to that individual based on their location. It also would also have been obvious to have used GPS to automatically provide location information so that a user device could leverage existing device functionality and alleviate the user from having to manually retrieve and submit location information.

Additionally, Todd and Morsberger each teaches real-time surveying, including real-time collection and transmission of information from a user device to a remote system or server. For

example, Todd explains that prior art systems provide for "real time, self-administered, customer satisfaction survey systems, methods, or devices." Todd, 2:40-49. Todd also describes its own survey system as providing remote, real-time or near real time signaling capability. *See id.*, 1:11-20, 4:20-5:34, 7:4-44, 8:25-37, 13:1-59, FIGs. 1, 3, Claims 5-6. Morsberger teaches a survey and review system that allows tabulation of user responses in real-time and for review of transaction records in real-time. *See* Morsberger, 11:63-12:10, 14:31-16:57. Morsberger explains that the real-time nature of the information tabulation allows for online updates to merchants and other parties also in real-time. *Id.* It would have been obvious to modify Kari's process to transfer responses in real-time in view of Morsberger's survey information forwarding processes and/or Todd's real-time survey response transfers, to predictably and beneficially result in a system that received questionnaire responses in real-time.

Additionally, Short and Brookler each teaches making questionnaire responses available via the Internet. Short describes collecting user responses to questions, storing that information at a central database, and providing that information for review over the Internet. *See*, *e.g.*, Short, Abstract, 3:14-4:14, 5:14-6:18, 23:17-27, 26:12-17, 27:7-13, FIGs. 1, 18-28. Brookler describes publishing survey results for review and analysis. *See*, *e.g.*, Brookler, Abstract, ¶¶ [0003], [0009]-[0013], [0033], [0052], [0055]-[0056], [0063]-[0065], [0073], FIGs. 1, 2, 5. Accordingly, it would have been obvious to make Kari's collected responses available via the Internet such that the responses are available for review and analysis.

i. Moton alone or with one or more of Clark, Mault, Morsberger, Todd, Brookler, and Short

As shown in Exhibit 3, Moton alone anticipates or renders obvious the Asserted Claim.

Additionally, Clark, Mault, Morsberger, Todd, Brooker, and Short teach features of the Asserted Claim. For example, Mault and Clark each teaches including functionality in a user

device application or program for providing location information to a remote system using GPS components integral to the user's device. *See*, *e.g.*, Mault, Abstract, 5:30-7:10, 15:25-16:30, 20:16-21:18, FIGs. 5, 6, 8, 9; Clark, 12:46-13:42, 14:35-54, FIGs. 51-53, 58. It would have been obvious to include a location question in Moton's survey to obtain an individual's location and more specifically target questions or other content to that individual based on their location. *See*, *e.g.*, Moton, 7:4-21, 10:18-31. It also would also have been obvious to have used GPS to automatically provide location information so that a user device could leverage existing device functionality and alleviate the user from having to manually retrieve and submit location information.

Additionally, Todd and Morsberger each teaches real-time surveying, including real-time collection and transmission of information from a user device to a remote system or server. For example, Todd explains that prior art systems provide for "real time, self-administered, customer satisfaction survey systems, methods, or devices." Todd, 2:40-49. Todd also describes its own survey system as providing remote, realtime or near real time signaling capability. *See id.*, 1:11-20, 4:20-5:34, 7:4-44, 8:25-37, 13:1-59, FIGs. 1, 3, Claims 5-6. Morsberger teaches a survey and review system that allows tabulation of user responses in real-time and for review of transaction records in real-time. *See* Morsberger, 11:63-12:10, 14:31-16:57. Morsberger explains that the real-time nature of the information tabulation allows for online updates to merchants and other parties also in real-time. *Id.* It would have been obvious to modify Moton's process to transfer questionnaire responses in real-time in view of Morsberger's survey information forwarding processes and/or Todd's real-time survey response transfers, to predictably and beneficially result in a system that received questionnaire responses in real-time.

Additionally, Short and Brookler each teaches making questionnaire responses available via the Internet. Short describes collecting user responses to questions, storing that information at a

central database, and providing that information for review over the Internet. *See*, *e.g.*, Short, Abstract, 3:14-4:14, 5:14-6:18, 23:17-27, 26:12-17, 27:7-13, FIGs. 1, 18-28. Brookler describes publishing survey results for review and analysis. *See*, *e.g.*, Brookler, Abstract, ¶¶ [0003], [0009]-[0013], [0033], [0052], [0055]-[0056], [0063]-[0065], [0073], FIGs. 1, 2, 5. Accordingly, it would have been obvious to make Moton's survey responses available via the Internet such that the responses are available for review and analysis using remotely located devices.

j. Parolkar alone or with one or more of Falls, Hanson, Kinnunen, Todd, Morsberger, Sugano, Short, Brookler, and Motoyama

As shown in Exhibit 36, Parolkar alone anticipates or renders obvious the Asserted Claim.

Additionally, Falls, Hanson, Kinnunen, Todd, Morsberger, Sugano, Short, and Motoyama also teach various features of the Asserted Claim. For example, Falls, Hanson, and Kinnunen each teaches loose networks, including, for example, cellular telecommunications networks, in which devices may be intermittently connected and in which applications and services may be used. *See, e.g.*, Falls, Abstract, 1:10-18, 1:30-52, 3:16-35, 5:20-31, 6:52-7:21, 7:53-8:9, 13:60-65, 16:35-43, 37:9-32; Hanson, Title, Abstract, 1:16-38, 2:45-3:34, 7:29-48, 10:66-12:21, 37:9-38:6, FIGs. 1, 2, 2A, 3; Kinnunen, 1:21-29, 8:16-45. Accordingly, it would have been obvious to incorporate the use of loosely-connected network devices in Parolkar such that the reach of Parolkar's application could be expanded to more types of networks and devices.

Additionally, Todd and Morsberger each teaches real-time surveying, including real-time collection and transmission of information from a user device to a remote system or server. For example, Todd explains that prior art systems provide for "real time, self-administered, customer satisfaction survey systems, methods, or devices." Todd, 2:40-49. Todd also describes its own survey system as providing remote, realtime or near real time signaling capability. *See id.*, 1:11-20, 4:20-5:34, 7:4-44, 8:25-37, 13:1-59, FIGs. 1, 3, Claims 5-6. Morsberger teaches a survey and

review system that allows tabulation of user responses in real-time and for review of transaction records in real-time. *See* Morsberger, 11:63-12:10, 14:31-16:57. Morsberger explains that the real-time nature of the information tabulation allows for online updates to merchants and other parties also in real-time. *Id.* It would have been obvious to modify Parolkar's application (e.g., an interactive script) and system for collecting data such that user responses entered through the application may be transmitted to the collecting server in real-time, in view of Morsberger's survey information forwarding processes and/or Todd's real-time survey response transfers, to predictably and beneficially result in a system that received questionnaire responses in real-time.

Additionally, Short, Brookler, and Motoyama each teaches making available user responses to a survey over the Internet. Short describes collecting user responses to questions, storing that information at a central database, and providing that information for review over the Internet. *See*, *e.g.*, Short, Abstract, 3:14-4:14, 5:14-6:18, 23:17-27, 26:12-17, 27:7-13, FIGs. 1, 18-28. Brookler describes publishing survey results for review and analysis. *See*, *e.g.*, Brookler, Abstract, ¶¶ [0003], [0009]-[0013], [0033], [0052], [0055]-[0056], [0063]-[0065], [0073], FIGs. 1, 2, 5. Similarly, Motoyama teaches monitoring user position data and sharing that position data over a wide area network (WAN), such as the Internet, to one or more users or devices. *See* Motoyama, 2:16-3:19, 3:59-5:19, FIGs. 1, 2. Accordingly, it would have been obvious to modify Parolkar's application (e.g., an interactive script) and system for collecting data such that user responses could be reviewed by other devices and users over the Internet. This would have benefited Parolkar's system by allowing remote access to survey results, i.e., so that a survey creator did not have to access the responses from a specific device or at the central computer.

* * *

It would also have been obvious to combine the teachings in any of the above described manners in view of any of the rationales set forth herein, including, for example, as the mere application of known techniques to a known product ready for improvement to yield predictable results or as the simple combination of prior art elements according to known methods to yield predictable results.

Additional evidence establishing that there would have been a motivation to combine the prior art references identified above includes the interrelated teachings of Aarnio, Alexander, Anderson Appelman, Barbosa, Barnes 595, Barnes 835, Barnes 949, Benefon ESC!, Britt, Chen, Creemer, Desai, FieldNote, Hall, Hancock, Hawkins, Kari, Kujirai, Kwon, Li, MacGregor, Meadows, Moton, ParkCruiser, Parolkar, Parry, Pascoe, ProShot Golf GPS System, Raith, Secret Shopper Application, Smith, Sugano, Swartz, Torrance, and/or Waytena, as explained above and in the charts attached in Exhibits 1-36 the effects of demands known to the design community or present in the marketplace; the existence of a known problem for which there was an obvious solution encompassed by the Asserted Claim; the existence of a known need or problem in the field of the endeavor at the time of the invention(s); and the background knowledge that would have been possessed by a POSITA.

In particular, a POSITA would have been motivated to combine any of Aarnio, Alexander, Anderson, Appelman, Barbosa, Barnes 595, Barnes 835, Barnes 949, Benefon ESC!, Britt, Chen, Creemer, Desai, Dodgen, FieldNote, Hall, Hancock, Hawkins, Kari, Kujirai, Kwon, Li, MacGregor, Meadows, Moton, ParkCruiser, Parolkar, Parry, Pascoe, ProShot Golf GPS System, Raith, Secret Shopper Application, Smith, Sugano, Swartz, Torrance, and/or Waytena with each other because each are in the same field of endeavor of providing location-based services. *See, e.g.*, Appelman at 1:65-67 ("The data sent to targeted users may be specific to a location of the

targeted users. The location may be a geographic location and/or an online location."); Anderson at Abstract ("A method and system for searching an information retrieval system for items of interest that are in proximity to geographical locations provided by the user."); Kari at 2:6-9 ("The invention is based on the idea that for routing of the query message and searching for the information in a database, the location information and possibly also travel route of the user are utilized."); Britt at 3:29-31 ("When the data processing device receives the request, it may then send a return signal containing status information such as the device's location."); Chen at Abstract ("A method and apparatus for providing a flexible means to distribute electronic surveys…to various queuing locations…. The preferred mode uses mobile survey devices (3450) in communication directly or indirectly with a Central Computer System (3600) remote from the queuing location (3400)."); Pascoe at 3 ("Integrated GPS: to provide 'accurate' location data automatically tagged to observations recorded in environments…"); Aarnio at 4:50-67 ("Thus the survey can be realized for instance so that the question receiver sees his/her terminal device those alternative answers that can be chosen in his/her particular geographical area."); Raith at 2:7-12 ("the device is programmed to respond to certain request types depending on input from the user of the device. Depending on the environment, the request types are related to services and events that are based on the location of the device or that are based on input from the user.")

Further, it is likely that the prior art references identified herein explicitly or implicitly reference other prior art references, were published in the same journals and/or presented at the same conferences, and/or were developed at common organizations, all of which would motivate one of skill in the art to combine them. As discussed above, these references are also within the field of the '748 patent and are directed to similar subject matter within that field. Additionally, any products, devices, or processes described in the references existed and/or were invented before

or during the period in which the claimed inventions were developed, providing further motivation to combine them.

In sum, each limitation of each claim of the ’748 Patent was well-known to those of ordinary skill in the art at the time. At best, the elements recited in the ’748 Patent are mere combinations and modifications of these well-known elements. A person of ordinary skill in the art would be able, and motivated, to improve the existing technology in the same or similar manner by combining or modifying the individual elements that were already known in the art to yield predictable results.

D. Lack of Secondary Considerations of Non-Obviousness

There is no evidence of any indicia of nonobviousness, including any long-felt but unsolved need; copying; failure of others; commercial success due to the patented invention; no industry praise; no unexpected results; no industry skepticism; and no licensing. Each is addressed in turn below:

No long-felt but unsolved need. There was no long-felt but unsolved need that the Asserted Claim of the ’748 Patent solves. The concepts described in the ’748 patent were all well-known before the alleged invention date of the ’748 patent as evidence by at least the patent itself, the file history and references cited herein, and the prior art identified herein.

No copying. Fall Line has provided no evidence that the accused functionality for the ’748 patent was copied, or more specifically, that any functionality that practices the Asserted Claim of the ’748 Patent was copied. *See Amazon, Inc. v. Barnesandnoble.com, Inc.*, 239 F.3d 1343, 1366 (Fed. Cir. 2001) (alleged copied feature must be an embodiment of the patented claims).

No failure of others. Fall Line has not shown that there is any evidence of a failure of others to invent or use the claimed techniques before the alleged invention date of the ’748 patent.

Nor could it, as the Asserted Claims recites concepts that were already known before the alleged invention of the ’748 Patent, as described above and detailed in the charts attached hereto.

No unexpected results. There is no evidence of any unexpected results when the elements of the Asserted Claim of the ’748 Patent were combined. Instead, as discussed above, the concepts contained in the Asserted Claim of the ’748 Patent were already combined in the same manner as the asserted claims. These prior art systems, as described in the attached charts, disclosed the same combination of elements, and the same result of that combination, that is recited in the Asserted Claim of the ’748 Patent. Thus, there were no unexpected results that arose from combining the well-known elements in the Asserted Claim of the ’748 Patent.

No industry skepticism. Fall Line has presented no evidence that others in the industry were skeptical before the alleged invention date of the ’748 Patent of the viability of what is claimed in the ’748 Patent. In fact, there was no industry skepticism concerning the claimed concepts that predates the ’748 Patent. As discussed above, many companies and individuals were already using the concepts claimed in the ’748 Patent. Thus, there was no industry skepticism that using or combining these well-known prior art concepts would be viable; others in the field were already combining them in the same manner as arranged in the Asserted Claim of the ’748 Patent .

No industry praise. Fall Line has presented no evidence of industry praise for the alleged invention of the ’748 Patent or that any functionality that allegedly practices the ’748 Patent has been praised by the industry. To the extent any praise is related to any functionality that allegedly practices the ’748 Patent, that praise is not due to the alleged novel features of the ’748 Patent, but instead only to features present in the prior art, which is not a sufficient nexus to be relevant to the question of industry praise for purpose of obviousness. *See Muniauction, Inc. v. Thomson Corp.*, 532 F.3d 1318, 1328 (Fed. Cir. 2008).

Simultaneous Invention. As demonstrated by the evidence cited and described herein, individuals working independently of the '748 Patent's named inventor previously, simultaneously, or near simultaneously invented the alleged invention of the Asserted Claim of the '748 Patent. This evidence supports a finding that the asserted claims would have been obvious to a person of ordinary skill in the art at the time of the invention. *See Geo. M. Martin Co. v. Alliance Mach. Sys.*, 618 F.3d 1294, 1305-06 (Fed. Cir. 2010) ("Independently made, simultaneous invention, made within a comparatively short space of time, are persuasive evidence that the claimed apparatus was the product only of ordinary mechanical or engineering skill.") (*citing Concrete Appliances Co. v. Gomery*, 269 U.S. 177, 184 (1925)) (internal quotations omitted); *see also Ecolochem, Inc. v. So. Cal. Edison Co.*, 227 F.3d 1361, 1379 (Fed. Cir. 2000).

E. Invalidity Under 35 U.S.C. § 112

Defendants further assert that the '748 Patent is invalid under 35 U.S.C. § 112. The following are the grounds upon which Defendants contend the Asserted Claim of the '748 Patent is invalid for failure to meet the requirements of 35 U.S.C. §§ 112, ¶ 1 and/or 112, ¶ 2, based on Defendants' investigation to date and currently-available information. Defendants reserve the right to supplement and amend these contentions based on further discovery and investigation including the deposition of any of the named parties, inventor of the '748 Patent, or prior artists.

i. Lack of Enablement and Written Description

35 U.S.C. § 112, ¶ 1 requires that the specification contain a written description of the invention. "[T]he hallmark of written description is disclosure." *Bos. Sci. Corp. v. Johnson & Johnson*, 647 F.3d 1353, 1361-62 (Fed. Cir. 2011) (citation omitted). The test for whether a specification adequately describes an invention is "whether the disclosure of the application relied upon reasonably conveys to those skilled in the art that the inventor had possession of the claimed

subject matter as of the filing date … [T]he test requires an objective inquiry into the four corners of the specification from the perspective of a person of ordinary skill in the art … [It] is a question of fact." *Ariad Pharms., Inc. v. Eli Lilly and Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (*en banc*); *Bos. Sci.*, 647 F.3d at 1362.

The enablement requirement of Section 112 demands that the patent specification enable "those skilled in the art to make and use the full scope of the claimed invention without 'undue experimentation.'" *Genentech, Inc. v. Novo Nordisk A/S*, 108 F.3d 1361, 1365 (Fed. Cir. 1997) (quoting *In re Wright*, 999 F.2d 1557, 1561 (Fed. Cir. 1993)). "[T]he scope of the claims must be less than or equal to the scope of the enablement." *Nat'l Recovery Tech., Inc. v. Magnetic Separation Sys., Inc.*, 166 F.3d 1190, 1196 (Fed. Cir. 1999).

Defendants contend that claim 7 is invalid under 35 U.S.C. § 112, ¶ 1. Claim 7 is invalid under ¶ 1 because the specification of the '748 Patent fails to provide a sufficient written description, enabling disclosure and/or fails to inform, with reasonable certainty, those skilled in the art about the scope of the invention the meaning of the term(s) and/or phrase(s):

Asserted Patent	Asserted Claim	Term(s) and/or Phrase(s) Lacking Written Description and Enablement
'748	7	"location identifying information" "loosely networked" / "the loose network" "executing questionnaire" "central computer" "making available via the Internet"

ii. Indefiniteness

The Asserted Claim is indefinite under 35 U.S.C. § 112, ¶ 2 because it "fail[s] to inform, with reasonable certainty, those skilled in the art about the scope of the invention." *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 989, 901 (2014).

In addition to Defendants' reservation of rights stated above, Defendants note that the Court's Docket Control Order contemplates that all indefiniteness issues be brought to the Court's attention through the *Markman* briefing process. Defendants detailed arguments as to indefiniteness will be presented at that time, *i.e.*, through the *Markman* meet and confer and briefing process.

Defendants contend that claim 7 of the '748 Patent is invalid under 35 U.S.C. § 112, ¶ 2. Claim 7 is invalid under ¶ 2 because it fails to inform, with reasonable certainty, those skilled in the art about the scope of the claimed invention:

Asserted Patent	Asserted Claim	Indefinite Terms
'748	7	"location identifying information" "loosely networked" / "the loose network" "executing questionnaire" "central computer" "making available via the Internet"

IV. ELIGIBILITY CONTENTIONS OF THE '748 PATENT

The Asserted Patent generically describes a method for collecting and transferring survey data from a remote computing device to a loosely networked computer. Claim 7 is specifically directed to the abstract idea of collecting survey data that includes location identifying information which is then used to customize the questionnaire. The Asserted Claim was written in completely functional terms that do not transform this abstract idea into a patent eligible invention.

Section 101 "defines the subject matter that may be patented under the Patent Act." *Bilski v. Kappos*, 561 U.S. 593, 601 (2010). Under § 101, the scope of patentable subject matter encompasses "any new and useful process, machine, manufacture, or composition of matter, or any

new and useful improvement thereof." *Id.* (quoting 35 U.S.C. § 101). These categories are not limitless, § 101 contains an important exception—abstract ideas are not patentable. *Alice*, 134 S. Ct. at 2354. The determination of whether a claim recites patent-eligible subject matter under § 101 is guided by the two-step analytical framework set forth in *Alice. Id*. at 2355. The first step requires determining whether the claims are directed to an abstract idea. *Id*. If so, the second step requires determining whether the claim elements, considered individually and as an ordered combination, "amount to significantly more" than the patent-ineligible concept. *Id*.

The first step in the *Alice/Mayo* test is to examine the fundamental concept, or the "focus" of the claim and determine whether the claim as a whole is directed to an abstract idea. *See Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015) ("Under step one of *Mayo/Alice*, the claims are considered in their entirety to ascertain whether their character as a whole is directed to excluded subject matter."). In applying step one of the *Alice* framework, courts recognize that it is useful to "compare claims at issue to those claims already found to be directed to an abstract idea in previous cases." *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1334 (Fed. Cir. 2016). The Federal Circuit has clarified that a relevant inquiry at *Mayo/Alice* step one is to "ask whether the claims are directed to a specific improvement in the capabilities of computing devices, or, instead, 'a process that qualifies as an 'abstract idea' for which computers are invoked merely as a tool.'" *Core Wireless Licensing S.A.R.L. v. LG Elecs., Inc.*, 880 F.3d 1356, 1361-62 (Fed. Cir. 2018) (quoting *Enfish, LLC*, 822 F.3d at 1336). In *Core Wireless Licensing*, the Federal Circuit noted that in *Enfish*, "unlike claims that merely 'add[ ] conventional computer components to well-known business practices,' the claimed self-referential table was 'a specific type of data structure designed to improve the way a computer stores and retrieves data in memory.'" *Id.* (quoting *Enfish*, 822 F.3d at 1338–39) (underlining added). The Federal Circuit further emphasized

that claims directed to the improvement in the functioning of a computer must teach a specific and new method that enables a computer "to do things it could not do before." *Id.* For example, in *Finjan, Inc. v. Blue Coat Systems, Inc.*, the Federal Circuit "held claims directed to a behavior-based virus scanning method directed to patent eligible subject matter because they 'employ[ ] a new kind of file that enables a computer security system to do things it could not do before, ..." *Finjan, Inc. v. Blue Coat Sys., Inc.*, 879 F.3d 1299 (Fed. Cir. 2018).

This Court has previously found that Claim 7 is directed to the abstract idea of sending a questionnaire, collecting responses that include location information, and making those responses available over the internet. *See Fall Line Patent v. Zoe's Kitchen*, No. 6:18-CV-00407-RWS, 2021 U.S. Dist. LEXIS 251484, at *10 (E.D. Tex. 2021). This Court provided reasoning, among others, that Claim 7 "represents routine tasks that could be performed by a human," relying on benefits that come "from the capabilities of a general-purpose computer, rather than the patented method itself." *Id.* at *9 (citing *eDekka LLC v. 3Balls.com, Inc.*, No. 2:15-CV-541-JRG, 2015 WL 5579840, at *4 (E.D. Tex. Sept. 21, 2015) and *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1095 (Fed. Cir. 2016)). Notably, this Court further opined that "people have long collected and transmitted information using questionnaires" including "location identifying information," and "the need to perform this task automatically is not a unique technical problem." *Id.*at *9-10. Thus, this Court correctly found that Claim 7 is directed to an abstract idea and should do so again. *Id*. at 6.

Likewise, courts have routinely found that claim limitations like displaying a first prompt, receiving a user input, communicating information to a server, and storing the information in a database for analysis, are routine pre-solution activities and, thus, do not add anything significant to the analysis. *See Mayo*, 132 S. Ct. at 1298; *Kroy IP Holdings, LLC v. Safeway, Inc.*, 107 F. Supp.

3d 677, 692 (E.D. Tex. 2015) (Bryson, J.), *aff'd*, 639 F. App'x 637 (Fed. Cir. 2016) (holding that claims "limited to the basic functions of a generic computer, including storing, transmitting, and displaying information" are patent ineligible); *see Miller Mendel, Inc. v. City of Anna,* 598 F. Supp. 3d 486, 497 (E.D. Tex., April 14, 2022) (finding the claims of the asserted patent abstract because the claims directed to collecting, anonymizing, and analyzing survey data 'make plain [that] the use of a computer is a straightforward substitute for human effort and merely automates the performance of collecting and storing the information').

As to the second step of *Alice*, a claim further lacks an inventive concept when it relies on functional claiming, providing purely functional steps to accomplish the goal of receiving survey data. It does not focus on "a specific means or method" of implementing the abstract idea, but instead is drawn to the abstract idea itself, "merely invok[ing] generic processes and machinery." *See Two-Way Media Ltd. v. Comcast Cable Commc'ns, LLC*, 874 F.3d 1329, 1337 (Fed. Cir. 2017); *see First-Class Monitoring, LLC v. United Parcel Serv. of Am., Inc*., 389 F. Supp. 3d 456, 464 (E.D. Tex. 2019) ("[I]n determining whether a particular claim is directed to an abstract idea, courts have focused on whether the claim is purely functional in nature rather than reciting how the claimed function is achieved. The Federal Circuit has identified functional claiming as an indicator of abstractness in a number of recent section 101 decisions." *See Affinity Labs of Texas, LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1258 (Fed. Cir. 2016) (claim was directed to an ineligible abstract idea because "[t]here [wa]s nothing in the claim that [wa]s directed to how to implement out-of-region broadcasting on a cellular telephone"); *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1348 (Fed. Cir. 2015) (finding claim abstract because it "contain[ed] no restriction on how the result [wa]s accomplished"); *see also Move, Inc. v. Real Estate Alliance Ltd*., 721 F. App'x 950, 956 (Fed. Cir. 2018) (explaining that "[i]nstead of focusing on the technical

implementation details of the zooming functionality, . . . claim 1 recite[d] nothing more than the result of the zoom.”).

For instance, functions “pertaining to obtaining and displaying location information are not patentable.” *X One, Inc. v. Uber Techs. Inc*., 239 F. Supp. 3d 1174, 1190-91 (N.D. Cal. 2017) (collecting cases). Likewise, communicating user data does not render a claim un-abstract, nor provide an inventive concept. *See Elec. Power Grp., LLV v. Alstom S.A.*, 830 F.3d 1350, 1355 (Fed. Cir. 2016) (“Nothing in the claims, understood in light of the specification, requires anything other than off-the-shelf, conventional computer, network, and display technology for gathering, sending, and presenting the desired information… We have repeatedly held that such invocations of computers and networks that are not even arguably inventive are insufficient to pass the test of an inventive concept in the application of an abstract idea.”); *see also Mayo*, 132 S. Ct. at 1298; *Kroy IP*, 107 F. Supp. at 692 (holding that claims “limited to the basic functions of a generic computer, including storing, transmitting, and displaying information” are patent ineligible); *Universal Secure Registry LLC v. Apple Inc.*, 10 F.4th 1342, 1346 (Fed. Cir. 2021) (“In cases involving authentication technology, patent eligibility often turns on whether the claims provide sufficient specificity to constitute an improvement to computer functionality itself.”); *ShoppersChoice.com*, 958 F. 3d at 1181-82 (“[E]nabling a first party to input authentication information, storing the authentication information, and providing the authentication information along with the advance notice of arrival to help ensure the customer that the notice was initiated by an authorized source—those claimed functions are also abstract. Businesses have long been supplying customers with order numbers and recording customer information —such as the client’s name, address, credit card number, and telephone number —as well as including such information in subsequent communications with that particular customer.”).

The Asserted Claim is directed to the same collecting, transferring, and analyzing of survey data obtained from a wireless device that has already been found abstract. (*see* '748 Patent at 10:55-58 ("As the mystery shopper enters the parking lot, the shopper will be prompted to enter a store number or location. If the handheld computer is equipped with a GPS receiver, this information could be entered automatically"). For instance, in *Open Parking, LLC v. ParkMe, Inc*., the representative claim had elements directed to, *inter alia*, a "device capable of accessing the internet" and "**a software application for receiving parking data transmitted . . . to the wireless communication device**." 2016 U.S. Dist. LEXIS 85260, at *21 (W.D. Pa. Jun. 30, 2016). (discussing the limitation in claim 1 of U.S. Patent No. 6,750,786) (emphasis added). The plaintiff in *Open Parking* argued that the machine-or-transformation test saved its patent, but the court instead held that "[l]imiting the application of these claims to mobile devices capable of accessing the Internet is really just limiting them to one selected form of generic computer technology." *Id*. at *28 (quoting *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 716 (Fed. Cir. 2014)). Ultimately, the court in *Open Parking* granted the defendant's motion to dismiss because the asserted patents were not patent-eligible. *Id*. at *29.

Because they claim the fundamental tools of location-based applications, and merely apply those tools to commerce using generic, off the shelf components, the Asserted Claim risk monopolizing the basic tools required for all electronic commerce applications and transactions today, and are ineligible under 35 U.S.C. § 101.

V. DOCUMENT PRODUCTION

Pursuant to P.R. 3-4(a), Defendants have produced documentation sufficient to show the operation of any aspects or elements of each Accused Instrumentality identified by Plaintiff in its P.R. 3-1(c) charts. Further, Defendants will make its source code for the Accused Instrumentality,

to the extent it is within Defendants' possession and control, available for inspection in accordance with the procedures in the Protective Order (Dkt. 70).

Additionally, pursuant to P.R. 3-4(b), Defendants have produced a copy of each prior art reference identified above pursuant to P.R. 3-3(a) which does not appear in the file histories of the '748 Patent as well as additional prior art references.

Dated: May 1, 2025

/s/ John R. Hutchins

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CERTIFICATE OF SERVICE

I certify that on May 1, 2025, a true and correct copy of the above and foregoing document was served on counsel for plaintiffs via email.

/s/ John R. Hutchins
John R. Hutchins