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

SMARTER AGENT, LLC,

Plaintiff,

v.

REAL ESTATE WEBMASTERS, INC.,

Defendant.

Civil Action No.: 6:19-cv-00182-ADA

JUDGE ALBRIGHT

Jury Trial Demanded

AMENDED COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff Smarter Agent, LLC ("Smarter Agent"), by its undersigned attorneys, alleges, with knowledge with respect to its own acts and on information and belief as to other matters, as follows:

NATURE OF THIS ACTION

- 1. Smarter Agent brings this action to compel Defendant Real Estate Webmasters, Inc. ("Real Estate Webmasters," "REW," or "Defendant") to cease infringing Smarter Agent's patents and to compensate Smarter Agent for patent infringement.
- 2. Smarter Agent invented systems and methods generally related to location-aware search engines and related storage technology. Smarter Agent has offered for sale software applications embodying or related to those inventions.
- 3. Smarter Agent's systems and methods make location-based search queries more efficient by allowing, for a location-based search focused in time and occurring at a specific location, a user to focus a location-based search query without leaving the context of the location-based search.
- 4. Smarter Agent provides products and services to real estate brokers and brokerages, including mobile apps and Smarter Agent's "Tech Connect" program. Smarter Agent's products and services have won multiple industry awards. These software products are compatible with both the

iOS and Android mobile platforms for wireless devices, such as smartphones and tablets. *See* Smarter Agent, *About Us* at https://www.smarteragent.com/about-us/ (last accessed Feb. 25, 2019), attached hereto as Exhibit PP.

- 5. In 2018, the Keller Williams brokerage firm purchased Smarter Agent Mobile, LLC, a spin-off of Smarter Agent, which now operates as a turnkey software-as-a-service provider.
- 6. Smarter Agent created through its own extensive expenditure of time, labor, effort, skill, and money various products and services built on the technology described in the Patents-in-Suit.

PARTIES

- 7. Smarter Agent is a private company that has its principal place of business at 756 Haddon Avenue, Suite 300, Collingswood, New Jersey 08108.
- 8. REW is a Canadian corporation with its principal place of business at 223 Commercial Street, Nanaimo, British Columbia, Canada, V9R5G8.
- 9. REW is registered for the right to transact business in Texas and has a Texas taxpayer number 32063773272. *See* Exhibit R.

JURISDICTION AND VENUE

- 10. This action arises under the patent laws of the United States of America, 35 U.S.C. §§ 1 et seq.
- This Court has jurisdiction over the subject matter of this action pursuant to 28 U.S.C.§§ 1331 and 1338(a).
- 12. This Court has personal jurisdiction over REW at least because REW conducts business, including infringing acts described herein, in this District. For example, REW provides app development services to, among others, SWPRE, a Texas real estate firm located in Brenham, Texas. The SWPRE app, developed by REW, allows a user to "search all homes, condos and lots for sale in

the Texas area." Apple, *SWPRE on the App Store*, at https://itunes.apple.com/us/app/swpre/id1438114345?mt=8 (last accessed Feb. 14, 2018), Ex. Q.

- 13. This Court has personal jurisdiction over REW at least because REW conducts business in this District. As noted above, REW has Texas Taxpayer Number 32063773272. *See* Ex. R.
- 14. Venue is proper in this District pursuant to 28 U.S.C. § 1391(c)(3), as venue is proper over a foreign corporation in "any judicial district."

THE PATENTS-IN-SUIT

- 15. On August 20, 2003, Brad and Eric Blumberg filed United States Patent Application No. 10/644,060 ("the '060 Application"). The '060 Application was duly examined and issued as United States Patent No. 7,457,628 ("the '628 Patent") (entitled "System and Method for Providing Information Based on Geographic Position"), on November 25, 2008.
- 16. Messrs. Blumberg assigned the '628 Patent to Smarter Agent, Inc. *See* USPTO Reel/Frame No. 020018/0796. Smarter Agent, Inc. assigned the '628 Patent to Smarter Agent, LLC. *See* USPTO Reel/Frame No. 020024/0532.
- 17. Smarter Agent is the owner of the '628 Patent and has the full and exclusive right to bring actions and recover past, present, and future damages for Defendant's infringement of the '628 Patent.
- 18. The '628 Patent is valid and enforceable. A copy of the '628 Patent is attached hereto as Exhibit A.
- 19. On November 21, 2008, Brad and Eric Blumberg filed United States Patent Application No. 12/275,683 ("the '683 Application"). The '683 Application was duly examined and issued as United States Patent No. 8,442,550 ("the '550 Patent") (entitled "System and Method for Providing Information Based on Geographic Position"), on May 14, 2013.

- 20. Messrs. Blumberg assigned the '550 Patent to Smarter Agent, Inc. *See* USPTO Reel/Frame No. 030214/0067. Smarter Agent, Inc. assigned the '550 Patent to Smarter Agent, LLC. *See* USPTO Reel/Frame No. 030214/0062.
- 21. Smarter Agent is the owner of the '550 Patent and has the full and exclusive right to bring actions and recover past, present, and future damages for Defendant's infringement of the '550 Patent.
- 22. The '550 Patent is valid and enforceable. A copy of the '550 Patent is attached hereto as Exhibit B.
- 23. On April 30, 2014, Brad and Eric Blumberg filed United States Patent Application No. 14/266,144 ("the '144 Application). The '144 Application was duly examined and issued as United States Patent No. 9,183,584 ("the '584 Patent") (entitled "System and Method for Providing Information Based on Geographic Position"), on November 10, 2015.
- 24. Messrs. Blumberg assigned the '584 Patent to Smarter Agent, Inc. *See* USPTO Reel/Frame No. 033524/0135. Smarter Agent, Inc. assigned the '584 Patent to Smarter Agent, LLC. *See* USPTO Reel/Frame No. 033524/0143.
- 25. Smarter Agent is the owner of the '584 Patent and has the full and exclusive right to bring actions and recover past, present, and future damages for the Defendant's infringement of the '584 Patent.
- 26. The '584 Patent is valid and enforceable. A copy of the '584 Patent is attached hereto as Exhibit C.
- 27. On October 26, 2015, Brad and Eric Blumberg filed United States Patent Application No. 14/922,428 ("the '428 Application"). The '428 Application was duly examined and issued as United States Patent No. 9,754,317 ("the '317 Patent") (entitled "System and Method for Providing Information Based on Geographic Position"), on September 5, 2017.

- 28. Messrs. Blumberg assigned the '317 Patent to Smarter Agent, Inc. See USPTO Reel/Frame No. 036883/0583. Smarter Agent, Inc. assigned the '317 Patent to Smarter Agent, LLC. See USPTO Reel/Frame No. 036883/0588.
- 29. Smarter Agent is the owner of the '317 Patent and has the full and exclusive right to bring actions and recover past, present, and future damages for Defendant's infringement of the '317 Patent.
- 30. The '317 Patent is valid and enforceable. A copy of the '317 Patent is attached hereto as Exhibit D.
- 31. On August 23, 2012, Brad and Eric Blumberg filed United States Patent Application No. 13/592,411 ("the '411 Application"). The '411 Application was duly examined and issued as United States Patent No. 9,002,371 ("the '371 Patent") (entitled "Position-Based Information Access Device and Method of Searching"), on April 7, 2015.
- 32. Messrs. Blumberg assigned the '371 Patent to Smarter Agent, Inc. See USPTO Reel/Frame No. 030876/0694. Smarter Agent, Inc. assigned the '371 Patent to Smarter Agent, LLC. See USPTO Reel/Frame No. 030876/0729.
- 33. Smarter Agent is the owner of the '371 Patent and has the full and exclusive right to bring actions and recover past, present, and future damages for Defendant's infringement of the '371 Patent.
- 34. The '371 Patent is valid and enforceable. A copy of the '371 Patent is attached hereto as Exhibit E.
- 35. On March 23, 2015, Brad and Eric Blumberg filed United States Patent Application No. 14/665,444 ("the '444 Application"). The '444 Application was duly examined and issued as United States Patent No, 9,754,333 ("the '333 Patent") (entitled "Position-Based Information Access Device and Method of Searching"), on September 5, 2017.

- 36. Messrs. Blumberg assigned the '333 Patent to Smarter Agent, Inc. See USPTO Reel/Frame No. 042181/0430. Smarter Agent, Inc. assigned the '333 Patent to Smarter Agent, LLC. See USPTO Reel/Frame No. 042181/0472.
- 37. Smarter Agent is the owner of the '333 Patent and has the full and exclusive right to bring actions and recover past, present, and future damages for Defendant's infringement of the '333 Patent.
- 38. The '333 Patent is valid and enforceable. A copy of the '333 Patent is attached hereto as Exhibit F.
- 39. On October 14, 2005, Brad and Eric Blumberg filed United States Patent Application No. 11/249,733 ("the '733 Application"). The '733 Application was duly examined and issued as United States Patent No. 7,599,795 ("the '795 Patent") (entitled "Mobile Location Aware Search Engine and Method of Providing Content for Same"), on October 6, 2009.
- 40. Messrs. Blumberg assigned the '795 Patent to Smarter Agent, Inc. *See* USPTO Reel/Frame No. 020018/0796. Smarter Agent, Inc. assigned the '795 Patent to Smarter Agent, LLC. *See* USPTO Reel/Frame No. 020024/0532.
- 41. Smarter Agent is the owner of the '795 Patent and has the full and exclusive right to bring actions and recover past, present, and future damages for Defendant's infringement of the '795 Patent.
- 42. The '795 Patent is valid and enforceable. A copy of the '795 Patent is attached hereto as Exhibit G.
- 43. On October 5, 2009, Brad and Eric Blumberg filed United States Patent Application No. 12/573,537 ("the '537 Application"). The '537 Application was duly examined and issued as United States Patent No. 8,473,199 ("the '199 Patent") (entitled "Mobile Location Aware Search Engine and Method of Providing Content for Same"), on June 25, 2013.

- 44. Messrs. Blumberg assigned the '199 Patent to Smarter Agent, Inc. See USPTO Reel/Frame No. 029166/0526. Smarter Agent, Inc. assigned the '199 Patent to Smarter Agent, LLC. See USPTO Reel/Frame No. 029166/0554.
- 45. Smarter Agent is the owner of the '199 Patent and has the full and exclusive right to bring actions and recover past, present, and future damages for Defendant's infringement of the '199 Patent.
- 46. The '199 Patent is valid and enforceable. A copy of the '199 Patent is attached hereto as Exhibit H.
- 47. Smarter Agent has identified on its website that its software products are covered by the '795 Patent, the '628 Patent, the '199 Patent, and the '550 Patent since at least October 2015.
- 48. Smarter Agent has identified on its website that its software products are covered by the '371 Patent since at least December 2015.
- 49. Smarter Agent has identified on its website that its software products are covered by the '584 Patent, the '317 Patent, and the '333 Patent since at least February 2019.
- 50. The '628, '550, '584, '317, '371, '333, '795, and '199 Patents are collectively referred to herein as the "Patents" or the "Patents-in-Suit."
- 51. As described below, Defendant has been and is still infringing the Patents by making, using, offering for sale, selling, and/or importing the "SWPRE" home search app or other similar home search apps ("the app"), and by advertising, promoting, instructing, and facilitating the use of infringing devices and/or systems, such as a smartphone having the app installed thereon (the "Accused System"). Defendant's acts of infringement have occurred within this District and elsewhere throughout the United States. *See* Claim Charts for the Patents, attached hereto as Exhibits I–P (charting the Patents against the SWPRE home search app).

52. In addition to the SWPRE home search app, Defendant has been and is still infringing the Patents by making, using, offering for sale, selling, and/or importing home search apps for, among others, Unity Home Group, Waterfront Properties, The Hightower Team, Pearly Realty, National Realty of Brevard, Kenna Real Estate Search, Oliver Realty, Jefferson Real Estate, We Know Boise Real Estate, LA Properties Search, Las Vegas Luxury Home Pro, Madison Neighborhoods Team, Home Sales Palm Beach, Bickerstaff Parham Real Estate, Rêve Realtors, Resource Realty Group, Hayden Rowe Properties, The Beaches 360, Fridrich & Clark, Chicago Luxury Condos & Homes, and/or Hightower Homes, and by advertising, promoting, instructing, and facilitating the use of infringing devices and/or systems, such as a smartphone having such an app installed thereon (the "Accused System"). Defendant's acts of infringement have occurred within Texas and elsewhere throughout the United States. See Apple, Real Estate Webmasters Inc – iPad & iPhone Apps at https://itunes.apple.com/us/developer/real-estate-webmasters- inc/id623362022#seeall/i-phonei-pad-apps (last accessed Feb. 22, 2019), attached hereto as Exhibit S; Google, Android Apps by Real Estate Webmasters® on Google Play at http://play.google.com/store/apps/developer?id=Real+Estate+Webmasters%Cw%AE (last accessed Feb. 25, 2019), attached hereto as Exhibit Y; see also Exhibits T–X (specific REW apps on the Apple App Store), Z–OO (specific REW apps on the Google Play Store).

THE SMARTER AGENT INVENTIONS

53. The Patents-in-Suit arose from the inventive work of Brad and Eric Blumberg.

Messrs. Blumberg recognized numerous issues with prior search systems that required a user to be physically located at a fixed computer or other terminal to access information databases. A key innovation of the Patents-in-Suit, developed long before the ubiquity of personal mobile electronic communication devices such as smartphones, was to enable a user's location to be identified by a remote information system via geolocation. That system could then provide information to the user

device *at* the user's location and with that information being associated with the user's specific location.

- 54. For example, prior to the Patents-in-Suit, if an individual spotted a piece of real estate of interest, such as a house for sale, they would need to memorize (or write down) the address of the house, travel to a computer or other terminal elsewhere, and search a database of real estate listings for information about the house. *See, e.g.*, '628 Patent at 2:13-19, 2:66-3:11.¹ In the systems and methods taught by the Patents-in-Suit, the user's location is automatically made available to a remote database via the user's portable device wherever the user is located when making the data request. *Id.* at 3:48-55. The user standing near a house for sale can thus use the portable device to immediately access information about the house as well as information related to nearby properties. *Id.* at 14:46-15:36. The user can also input information into the user device, storing information in the information system or requesting further information from the information system, such as specific information about nearby landmarks. *See, e.g.*, '795 Patent at 5:25-39. This is a key innovation over conventional real estate search systems in which information generally traveled in one direction, from a Realtor to a customer.
- 55. The inventions claimed in the Patents-in-Suit are centered on at least three technical components: (1) the user's portable device (referred to as a "wireless device," "electronic device," "mobile electronic device," or "handheld wireless device" in the claims) having a user interface that includes menus and icons, (2) geolocation technology to identify the location of the user's portable device, and (3) an "information system" that stores information in a database located remotely from the user's device. The innovations of the Patents-in-Suit allow immediate access to location-specific information while a user is out and about, as well as the ability for a user to provide information to a

¹ Exemplary citations are made to the '628 Patent, which is the earliest-issued of the Patents-in-Suit. The disclosure of the '628 Patent is thus applicable to all Patents-in-Suit.

remotely-located server, and again these innovations were conceived years before the technology became commonplace through the ubiquity of smartphone ownership. The inventors of the Patents-in-Suit foresaw the need to access information "on the fly," and the eight Patents-in-Suit asserted in this action claim various implementations of that technology.

56. An early prototype of the technology developed by Messrs. Blumberg is shown below.



57. The physical hardware of the prototype was constructed by starting with a Palm VIIx personal digital assistant, adding a GPS clip from a different manufacturer, and writing software to connect the assembled hardware components and communicate with a remote real estate database. The inventors of the Patents-in-Suit thus anticipated the use of a customized software application on a GPS-enabled mobile device for use in real estate searching, several years before the advent of smartphone apps.

THE CLAIMS OF THE PATENTS-IN-SUIT ARE NOT DRAWN TO ASBTRACT IDEAS

- 58. The claims of the Patents-in-Suit are drawn to patent-eligible subject matter under Section 101. The '371 Patent, the '584 Patent, the '317 Patent and the '333 Patent issued after the Supreme Court's decision in *Alice Corp. v. CLS Bank International*, 573 U.S. 208 (2014) and thus were examined under the post-*Alice* standard. Section 101 was specifically referenced in the communications between the Examiner and the Applicant during the prosecution of the '317 Patent. The Examiner's determination that the post-*Alice* patents were drawn to patent-eligible subject matter is applicable to all of the Patents-in-Suit.
- 59. The claims of the Patents-in-Suit are directed to a network architecture and specific technical features. The claims generally include an "information system" and a user device such as a mobile device that is located via geolocation. Several of the claims also rely on specific user interface functionality such as the use of icons and first and second menus. In short, the Patents-in-Suit involve, *inter alia*, physical network communications, discrete hardware components, and technical solutions such as geolocation and dynamic database management.
- 60. The "information system" envisioned by the Patents-in-Suit is an improvement over prior art, conventional sources of information for real estate listings such as printed books and static databases. For example, the '628 Patent describes an information system including a "seamless" grid, meaning the information is updated both spatially and temporally, which allows information to

"be updated in real-time." '628 Patent at 9:32-35. The Patent explains that such a "seamless" grid "may be highly desirable as it allows the user of an electronic device to query the database containing the information to receive information about the current conditions of any particular location they wish." *Id.* at 9:52-56. The patent further explains that "the invention includes a method of creating a seamless database including obtaining information from a number of different sources associated with a number of locations. This information may, but need not, define a seamless grid." *Id.* at 11:42-46. This illustrates another technical improvement over prior art, unreliable search systems.

- 61. The Patents-in-Suit also discuss "providing" information via a specific mobile user interface ('628 Patent at 14:65-67), and describe transmitting and receiving using radio technology, bar codes, laser emitters, optical sensors, radar, and via various forms of physical networks. *See*, *e.g.*, *id.* at 5:34-58, 6:51-63. These physical technical elements are not "abstractions," and communication via these methods requires specific technical implementations.
- 62. The Patents-in-Suit are also directed to an improved network. As discussed above, the use of electronic networks to exchange information concerning real estate in the prior art had several problems in terms of reliability and usability. Prior art systems and methods were limited by unreliable human memory and communication, static and incomplete sources of information, and the inability to transmit certain forms of information (such as graphics and information about nearby properties) via telephone. The intrinsic record of the Patents-in-Suit describes these problems:

The traditional method of buying real estate requires the prospective purchaser to transact through a real estate broker for virtually every aspect of the transaction, from finding a desired property to completing the sale. Often the most difficult part of the process, from the buyer's perspective, is locating a desired piece of real estate. There are generally two methods employed to locate a desired piece of property.

The first method relies solely on the real estate broker to use his or her contacts, including listing services, to locate property that meets the buyer's specifications. The second is more random, in that if a buyer

happens to pass a piece of property that is displaying a "for sale" sign, the buyer can write down the phone number shown on the sign to later inquire about the property, which then places the transaction totally within the broker's hands, as the broker controls all the information relating to the property (e.g., size and cost).

'628 Patent at 2:5-19.

- 63. The Patents-in-Suit solve these problems, in part, through the use of location-based network technology, which is an improvement over earlier telephone network-based real estate search processes.
- 64. The improvements of the Patents-in-Suit would be readily apparent to a person skilled in the art. A buyer orally describing her location to a Realtor by phone is not equivalent to providing to an information system that stores and provides information related to a geographic location associated with a position of a mobile electronic device. There is a vast difference between the inconvenience of manually searching real estate listings by remembering one's location and the geolocation technology envisioned by the Patents-in-Suit. *See* '628 Patent at 2:13-19, 2:66-3:11, 3:48-55.
- 65. Similarly, a real estate agent providing information (via a communications network) is unable to do so in the claimed manner without using geolocation technology to automatically pinpoint the location of the user and automatically obtain information specific to that location. In other words, the agent is constrained by the prior art problems identified and solved by the Patents-in-Suit—reliance on customer memory and the ability to locate and use a conventional telephone to contact the real estate agent. Further, a Realtor, map, phone book, and MLS book cannot be considered an "information system" at least because such printed information sources references cannot be "dynamically updated" as required by certain of the asserted claims. A dynamically updated database is a technical improvement over a real estate agent reading from a static book.

- 66. Further, a "menu" displayed on the user interface of a mobile device is not analogous to information provided orally by telephone. Providing a user interface within a networked communication system is an improvement over prior networked systems that relied on slower and less reliable human communication. Nor is a buyer orally conveying search preferences the type of technical query envisioned by the Patents-in-Suit. Again, automated search technology is an improvement over using a communication network to request that a real estate agent look up information in printed material.
- 67. There are thus numerous differences between a prior art telephone-based real estate search process and the Patents-in-Suit, all of which involve discrete technical solutions that set the claims apart from abstract ideas. Because of this, the Patents-in-Suit claim an *improvement* in a *computer network*, which is non-abstract. The inventors of the Patents-in-Suit recognized a problem in using existing telecommunications networks to obtain location-specific information and developed an improvement to the preexisting approach by utilizing specific geolocation, mobile, and user interface technology. This improved network technology is not an abstract idea.
- 68. The Patents-in-Suit also improve network security. While communications over a telephone network are generally not secure, the Patents-in-Suit envision using encryption to secure the location-based communications at issue in at least some of the claims. *See*, *e.g.*, '628 Patent at 20:22-30.
- 69. The improvements embodied in the Patents-in-Suit are improvements in the functioning of a network to provide location-centric information. Preexisting networks, without electronic database functionality, geolocation technology, or dynamic search technology, could not process communications and information in the way that the improved system of the Patents-in-Suit does. The Patents-in-Suit add new functionality to the network, such as geolocation and a user interface enabling two-way updating of information, that makes the network itself operate in an

improved manner and such new functionality constitutes patent-eligible improvements over conventional systems.

70. The allegations above apply to each of the Patents-in-Suit. Therefore, the Patents-in-Suit are not drawn to abstract ideas.

THE PATENTS-IN-SUIT CONTAIN INVENTIVE CONCEPTS

- 71. As set forth in the Declaration from Dr. Ryan Garlick (which is incorporated by reference ("Garlick Decl.")), backed by Dr. Garlick's expertise both in computer networking and real estate, the Patents-in-Suit contain inventive concepts.
- 72. As a general matter, the inventors of the Patents-in-Suit recognized the possibility of using mobile devices for complex, location-based search operations long before such functionality became commonplace via the advent of smart phones. Garlick Decl. ¶ 11. The best-selling mobile phone in the U.S. in February 2000 (the critical date for the Asserted Patents) was the Nokia 3310.



This device had no WiFi, no Bluetooth, no GPS, and no apps other than the simple built-in apps such as games, a calculator and a currency converter. *Id.* It had a monochrome five-line text display and could send SMS text messages. *Id.* The idea of obtaining and displaying dynamically updated real estate information based on this device's current location was not only not well-understood, routine, or conventional, it was completely unknown. *Id.* Indeed, as discussed above, the inventors of the Patents-in-Suit had to combine a personal digital assistant with no communication functionality with a GPS device and also write specific software to get the two components to operate with a real estate database. Such innovation was unknown at the time of invention.

- 73. As Dr. Garlick also explains, there were significant shortcomings in conventional methods of shopping for real estate that were solved by the innovations of the Patents-in-Suit. Id. ¶ 12. In particular, the Patents-in-Suit integrate technological components—a database, geolocation, a mobile device with an improved user interface, and in certain claims dynamically updated information—to provide real estate services that were not previously available. *Id.* Previously, a real estate agent assisting with a search was required to manually search a database or printed resources on behalf of a client and present search results either over the phone or in person. *Id.* Conveying searches over the phone precluded the use of visuals—such as the icons claimed by the Patents-in-Suit—to assist the buyer in evaluating the search results. *Id.* If the presentation of search results lacked visuals or detailed information, it inevitably led to showing properties that the prospective buyer would reject upon first sight. Id. The problem was ameliorated through pictures or additional information available from a dynamically updated database. *Id.* Accessing information from a dynamically-updated database also lessened the concern of showing up at a property for sale to find that circumstances concerning the property had changed—for example, the property had been sold, or the price had changed. *Id.* In short, the conventional approach of presenting less detailed, less frequently updated information or information over the phone inevitably resulted in the buyer rejecting certain listings when seen in person, leading to wasted time and effort.
- 74. Dr. Garlick also explains that prior to the Patents-in-Suit, a real estate agent and buyer visiting a neighborhood to view a house for sale would often encounter other houses with "For Sale" signs that had not been included in the agent's manual search results. *Id.* ¶ 13. Obtaining information about such an unexpected property was cumbersome and unreliable, requiring a phone call to the seller's agent who may not have then been available. *Id.* With the Patents-in-Suit, information about such a property is available instantaneously using an electronic database,

geolocation of the buyer's mobile device, and the mobile device delivering detailed information. *Id.*These advantages were not present in the prior art and are only enabled by the innovative integration of technological components, as claimed in the Patents-in-Suit.

- 75. The technical innovations of the Patents-in-Suit are embodied in the claims. Each of the asserted claims requires discrete technological components—an information system, geolocation technology, and a mobile device (with an improved user interface)—that are integrated in a novel and unconventional way to deliver the advantages of the Patents-in-Suit. *Id.* ¶ 14.
- 76. To the extent the inventions of the Patents-in-Suit rely on generic computer components, the specific combination and integration of those components was not routine, conventional, or well-understood at the time of invention. The Patents-in-Suit provide an unconventional application using a novel integration of technical components.
- 77. As discussed above, the inventors of the Patents-in-Suit also recognized the possibility of customized software running on GPS-enabled mobile communication devices years before smartphone apps became commonplace. *Id.* ¶ 15. This approach therefore was not routine, conventional, or well-understood. *Id.* Rather, the inventors redesigned a personal electronic device to utilize technology in a new and innovative way. *Id.*
- 78. Beyond the use of personal electronic devices to transmit and obtain location-specific information, the inventors recognized that the use of an unconventional interface would provide further utility by enabling a user to obtain different types of information—specifically graphical information—about properties of interest. *Id.* ¶ 16. Graphics have become critical in the sale and marketing of real estate, and the inventors recognized the possibility of obtaining instantaneous graphical information about properties while a device user is out in the field. *Id.* The Patents-in-Suit thus describe a particular manner of summarizing and presenting information in electronic devices that was not routine, conventional, or well-understood at the time of invention. *Id.*

- 79. The use of geolocation, a dynamic database, and a user interface to obtain information about not only a specific property of interest but similar properties was also not routine, conventional, or well-understood at the time of invention. *Id.* ¶ 17. Not only could real estate agents not provide such information reliably by telephone, but the now-commonplace concept of a "similar search" or "suggested search" was not well-known at the time of invention. *Id.* The inventors recognized that the integrated technology of the Patents-in-Suit could be used to provide more, and better, information that would assist a user in searching for real estate. *Id.*
- 80. In addition, certain claims of the Patents-in-Suit are directed to technology that provides the ability for users to provide reviews via mobile electronic devices, which further updates the database of information concerning properties. This further enhances the reliability and quantity of information available to other users via the information system. Id. ¶ 18. This improvement in the value of resources based on the increased number of participants is an example of the phenomenon known as the "network effect." Id. This is another improvement enabled by the Patents-in-Suit that was not routine, conventional, or well-understood at the time of invention.

81. Claim 15 of the '317 Patent recites:

15. A method, comprising:

providing from a mobile electronic device to an information system information related to a geographic location associated with a position of the mobile electronic device, the information system being at a geographic location remote from the geographic location of the mobile electronic device, the information system including a base grid defining a plurality of geographic locations and a database configured to be dynamically updated and to associate information related to a plurality of properties for sale input to the database to geographic locations within the base grid;

receiving at the mobile electronic device from the information system a plurality of location identifiers, each location identifier from the plurality of location identifiers including a unique street address of a property for sale located proximate to the geographic location of the mobile electronic device;

transmitting from the mobile electronic device to the information system data associated with a selection of one location identifier from the plurality of location identifiers;

receiving at the mobile electronic device from the information system a plurality of selectable icons to search within a predetermined radius, each icon from the plurality of selectable icons configured to initiate a search within a different predetermined radius of the geographic location of the mobile electronic device when selected; and

transmitting from the mobile electronic device to the information system data associated with a selection of a selectable icon from the plurality of selectable icons.

- 82. The claim limitation "a database configured to be dynamically updated and to associate information related to a plurality of properties for sale input to the database to geographic locations within the base grid" corresponds to the inventive concept of accessing (and potentially updating) current information in a database. Garlick Decl. ¶ 20. As discussed above, this was a vast improvement over conventional search systems that relied on static information. *Id.* Importantly, these advantages are recognized in the Patent specification, showing these advantages were understood by the inventors. *See, e.g.*, '317 Patent at 20:4-24.
- 83. Further, the claim limitations "providing from a mobile electronic device to an information system information related to a geographic location associated with a position of the mobile electronic device, the information system being at a geographic location remote from the geographic location of the mobile electronic device" shows the inventive concept of geolocation for the purposes of obtaining location-specific information. Garlick Decl. ¶ 21. That too is an improvement over conventional, unreliable methods of incorporating a specific location into a real estate search. *Id.* These advantages, too, are delineated in the specification and recognized by the inventors. *See, e.g.*, '317 Patent at 17:20-48.
- 84. Claim 15 also incorporates the inventive concept of providing information for similar properties within a particular radius, which is incorporated, *e.g.*, in the claimed limitations "receiving

at the mobile electronic device from the information system a plurality of location identifiers, each location identifier from the plurality of location identifiers including a unique street address of a property for sale located proximate to the geographic location of the mobile electronic device." Garlick Decl. ¶ 22. This automatic provision of information concerning multiple properties within a geolocated radius obviates several of the problems in conventional searches, in which a customer was required to orally convey a location to a real estate agent and the real estate agent had to consult static information sources to manually identify nearby properties. *Id.* This conventional search process had myriad reliability problems, as explained above. *Id.* The specification again recognizes this advantage of the claimed methods and system. *See, e.g.*, '317 Patent at 18:23-48.

85. As a final example, Claim 15 demonstrates the inventive concept of using a specific user interface to facilitate the transmittal and analysis of information, including in the limitation "a plurality of selectable icons." Garlick Decl. ¶ 23. The claimed interface is an improvement over conventional telephone-based systems, providing a technologically enhanced search operation with numerous benefits. *Id.* The icons also facilitate robust location-specific searching, as shown in below reproduced Figure 10 from the '317 Patent:

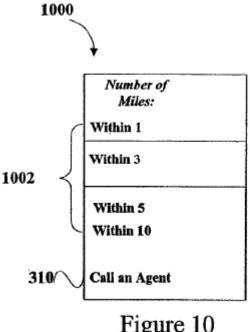


Figure 10

- 86. The figure shows a plurality of icons to select the particular location-specific information the user desires based on radius of location for automatic presentation on the user interface, a technical feature that was not available in conventional real estate search processes. *Id.* ¶ 24.
 - 87. In sum, the Patents-in-Suit are thus drawn to patent-eligible subject matter.
- 88. The foregoing allegations regarding the '317 Patent are applicable to the each of the Patents-in-Suit to the extent those Patents claim the same or similar features to those claimed by the '317 Patent.

COUNT I: INFRINGEMENT OF THE '628 PATENT

- 89. Smarter Agent repeats and re-alleges the allegations of the above paragraphs as if fully set forth herein.
 - 90. The '628 Patent includes 21 claims. '628 Patent, Ex. A at 20:57–24:25.
- 91. The patented systems and methods make location-based search queries more efficient by allowing, for a location-based search focused in time and occurring at a specific location, a user

to focus a location-based search query without leaving the context of the location-based search. *E.g.*, '628 Patent, Ex. A at 13:51–56 ("At an operation 204, user's 106 location (i.e., geographic position, latitude/longitude is determined using one of the methods described above. At an operation 206, wireless device 102 provides the geographic position information to location-centric information system 110."), 13:57–62 ("In an operation 208, location-centric information system 110 may retrieve location-centric information from database 112 based on the geographic position information provided by wireless device 102. In one embodiment, location-centric information system 110 also retrieves a location identifier from database 112."); 15:7–12 ("Geographic position information of wireless device 102 may be attributed to a distinct landmark within location-centric information system 110. In that case, location-centric information system 110 may only transmit to wireless device 102 a single location identifier. In such an embodiment, user 106 would then select the single location identifier."); 15:37–40 ("When wireless device 102 receives the location-centric information to obtain location-centric information relevant to user 106.").

- 92. Among the specific technologic improvements directed to devices used for providing information based on geographic position, the '628 Patent describes systems and methods that improve a user interface to a location-based search engine, making information retrieval more streamlined and efficient. *E.g.*, '628 Patent, Ex. A at 15:37–40 ("When wireless device 102 receives the location-centric information in an operation 214, user 106 is able to manipulate the location-centric information to obtain location-centric information relevant to user 106.").
- 93. Among the specific technologic improvements to a user interface for location-based search engines, the '628 Patent claims systems and methods that improve the user interface in such a manner that a user may more efficiently, and thus more quickly, discover relevant location-based information. *E.g.*, '628 Patent, Ex. A at 22:1–23 (Claim 10) ("receiving directly from the

information system a second menu of location-centric information associated with the property based on the selection of the icon to search for a property for sale, the second menu having a plurality of selectable search icons including an icon to search based on the geographic location of the electronic device").

- 94. Allowing a user to focus a location-based search query while remaining within the context of an initial location-based search enables the user to discover relevant location-based data more efficiently, and thus, more quickly.
- 95. The claimed elements and claimed combinations of the '628 Patent were not well-understood, routine, and conventional to a skilled artisan in the relevant field.
- 96. The '628 Patent claims a mobile location aware search engine and method of providing content for same, as opposed to traditional methods of obtaining location-centric information, which relied on conventional elements and combinations.
- 97. Defendant directly infringes one or more claims of the '628 Patent without authority by using, including without limitation testing, products and systems, including by way of example, the Accused System. *See* Claim Chart for the '628 Patent, attached hereto as Exhibit I.
- 98. Defendant has been and is directly infringing, either literally or under the doctrine of equivalents, at least Claim 10 of the '628 Patent by using the Accused System. *See* Claim Chart for the '628 Patent, attached hereto as Exhibit I.
- 99. Defendant has had actual knowledge of the '628 Patent at least as early as the date of service of the original Complaint.
- 100. Defendant's acts of infringement have occurred within this District and elsewhere throughout the United States.

COUNT II: INFRINGEMENT OF THE '550 PATENT

- 101. Smarter Agent repeats and re-alleges the allegations of the above paragraphs as if fully set forth herein.
 - 102. The '550 Patent includes 14 claims. '550 Patent, Ex. B at 20:61–22:43.
- 103. The patented systems and methods make location-based search queries more efficient by allowing, for a location-based search focused in time and occurring at a specific location, a user to focus a location-based search query without leaving the context of the location-based search. E.g., '550 Patent, Ex. B at 13:54–59 ("At an operation 204, user's 106 location (i.e., geographic position, latitude/longitude) is determined using one of the methods described above. At an operation 206, wireless device 102 provides the geographic position information to location-centric information system 110."), 13:60–65 ("In an operation 208, location-centric information system 110 may retrieve location-centric information from database 112 based on the geographic position information provided by wireless device 102. In one embodiment, location-centric information system 110 also retrieves a location identifier from database 112."); 15:11–16 ("Geographic position information of wireless device 102 may be attributed to a distinct landmark within location-centric information system 110. In that case, location-centric information system 110 may only transmit to wireless device 102 a single location identifier. In such an embodiment, user 106 would then select the single location identifier."); 15:40–43 ("When wireless device 102 receives the location-centric information in an operation 214, user 106 is able to manipulate the location-centric information to obtain location-centric information relevant to user 106.").
- 104. Among the specific technologic improvements directed to devices used for providing information based on geographic position, the '550 Patent describes systems and methods that improve a user interface to a location-based search engine, making information retrieval more streamlined and efficient. *E.g.*, '550 Patent, Ex. B at 15:40–43 ("When wireless device 102 receives

the location-centric information in an operation 214, user 106 is able to manipulate the location-centric information to obtain location-centric information relevant to user 106.").

- search engines, the '550 Patent claims systems and methods that improve the user interface in such a manner that a user may more efficiently, and thus more quickly, discover relevant location-based information. *E.g.*, '550 Patent, Ex. B at 21:42–22:21 (Claim 8) ("receiving directly from the information system a second menu of location-centric information associated with the property based on the selection of the icon to search for a property for sale, the second menu having a plurality of selectable search icons including an icon to search based on the geographic location of the electronic device").
- 106. Allowing a user to focus a location-based search query while remaining within the context of an initial location-based search enables the user to discover relevant location-based data more efficiently, and thus, more quickly.
- 107. The claimed elements and claimed combinations of the '550 Patent were not well-understood, routine, and conventional to a skilled artisan in the relevant field.
- 108. The '550 Patent claims a mobile location aware search engine and method of providing content for same, as opposed to traditional methods of obtaining location-centric information, which relied on conventional elements and combinations.
- 109. Defendant directly infringes one or more claims of the '550 Patent without authority by using, including without limitation testing, products and systems, including by way of example, the Accused System. *See* Claim Chart for the '550 Patent, attached hereto as Exhibit J.
- 110. Defendant has been and is directly infringing, either literally or under the doctrine of equivalents, at least Claim 8 of the '550 Patent by using the Accused System. *See* Claim Chart for the '550 Patent, attached hereto as Exhibit J.

- 111. Defendant has had actual knowledge of the '550 Patent at least as early as the date of service of the original Complaint.
- 112. Defendant's acts of infringement have occurred within this District and elsewhere throughout the United States.

COUNT III: INFRINGEMENT OF THE '584 PATENT

- 113. Smarter Agent repeats and re-alleges the allegations of the above paragraphs as if fully set forth herein.
 - 114. The '584 Patent includes 16 claims. '584 Patent, Ex. C at 21:9–24:32.
- 115. The patented systems and methods make location-based search queries more efficient by allowing, for a location-based search focused in time and occurring at a specific location, a user to focus a location-based search query without leaving the context of the location-based search. E.g., '584 Patent, Ex. C at 13:66–14:4 ("At an operation 204, user's 106 location (i.e., geographic position, latitude/longitude) is determined using one of the methods described above. At an operation 206, wireless device 102 provides the geographic position information to location-centric information system 110."), 14:5–10 ("In an operation 208, location-centric information system 110 may retrieve location-centric information from database 112 based on the geographic position information provided by wireless device 102. In one embodiment, location-centric information system 110 also retrieves a location identifier from database 112."); 15:23–28 ("Geographic position information of wireless device 102 may be attributed to a distinct landmark within location-centric information system 110. In that case, location-centric information system 110 may only transmit to wireless device 102 a single location identifier. In such an embodiment, user 106 would then select the single location identifier."); 15:52–55 ("When wireless device 102 receives the location-centric information in an operation 214, user 106 is able to manipulate the location-centric information to obtain location-centric information relevant to user 106.").

- 116. Among the specific technologic improvements directed to devices used for providing information based on geographic position, the '584 Patent claims systems and methods that improve a user interface to a location-based search engine, making information retrieval more streamlined and efficient. *E.g.*, '584 Patent, Ex. C at 15:52–55 ("When wireless device 102 receives the location-centric information in an operation 214, user 106 is able to manipulate the location-centric information to obtain location-centric information relevant to user 106.").
- search engines, the '584 Patent describes systems and methods that improve the user interface in such a manner that a user may more efficiently, and thus more quickly, discover relevant location-based information. *E.g.*, '584 Patent, Ex. C at 23:5–33 (Claim 12) ("receiving at the mobile electronic device from the information system a menu of location-centric information associated with the selected location identifier, the menu having a plurality of selectable icons to search within a predetermined radius, the plurality of selectable icons including a plurality of icons each configured to initiate a search within a predetermined radius of the geographic location of the mobile electronic device when selected).
- 118. Allowing a user to focus a location-based search query while remaining within the context of an initial location-based search enables the user to discover relevant location-based data more efficiently, and thus, more quickly.
- 119. The claimed elements and claimed combinations the '584 Patent were not well-understood, routine, and conventional to a skilled artisan in the relevant field.
- 120. The '584 Patent claims a mobile location aware search engine and method of providing content for same, as opposed to traditional methods of obtaining location-centric information, which relied on conventional elements and combinations.

- 121. Defendant directly infringes one or more claims of the '584 Patent without authority by using, including without limitation testing, products and systems, including by way of example, the Accused System. *See* Claim Chart for the '584 Patent, attached hereto as Exhibit K.
- 122. Defendant has been and is directly infringing, either literally or under the doctrine of equivalents, at least Claim 12 of the '584 Patent by using the Accused System. *See* Claim Chart for the '584 Patent, attached hereto as Exhibit K.
- 123. Defendant has had actual knowledge of the '584 Patent at least as early as the date of service of the original Complaint.
- 124. Defendant's acts of infringement have occurred within this District and elsewhere throughout the United States.

COUNT IV: INFRINGEMENT OF THE '317 PATENT

- 125. Smarter Agent repeats and re-alleges the allegations of the above paragraphs as if fully set forth herein.
 - 126. The '317 Patent includes 20 claims. '317 Patent, Ex. D at 21:43–24:53.
- 127. The patented systems and methods make location-based search queries more efficient by allowing, for a location-based search focused in time and occurring at a specific location, a user to focus a location-based search query without leaving the context of the location-based search. *E.g.*, '317 Patent, Ex. D at 14:25–30 ("At an operation 204, user's 106 location (i.e., geographic position, latitude/longitude) is determined using one of the methods described above. At an operation 206, wireless device 102 provides the geographic position information to location-centric information system 110."), 14:31–36 ("In an operation 208, location-centric information system 110 may retrieve location-centric information from database 112 based on the geographic position information provided by wireless device 102. In one embodiment, location-centric information system 110 also retrieves a location identifier from database 112."); 15:51–55 ("Geographic position information of

wireless device 102 may be attributed to a distinct landmark within location-centric information system 110. In that case, location-centric information system 110 may only transmit to wireless device 102 a single location identifier. In such an embodiment, user 106 would then select the single location identifier."); 16:14–17 ("When wireless device 102 receives the location-centric information in an operation 214, user 106 is able to manipulate the location-centric information to obtain location-centric information relevant to user 106.").

- 128. Among the specific technologic improvements directed to devices used for providing information based on geographic position, the '317 Patent describes systems and methods that improve a user interface to a location-based search engine, making information retrieval more streamlined and efficient. *E.g.*, '317 Patent, Ex. D at 16:14–17 ("When wireless device 102 receives the location-centric information in an operation 214, user 106 is able to manipulate the location-centric information to obtain location-centric information relevant to user 106.").
- search engines, the '317 Patent claims systems and methods that improve the user interface in such a manner that a user may more efficiently, and thus more quickly, discover relevant location-based information. *E.g.*, '317 Patent, Ex. D at 23:52–24:31 (Claim 15) ("receiving at the mobile electronic device from the information system a plurality of selectable icons to search within a predetermined radius, each icon from the plurality of selectable icons configured to initiate a search within a different predetermined radius of the geographic location of the mobile electronic device when selected.").
- 130. Allowing a user to focus a location-based search query while remaining within the context of an initial location-based search enables the user to discover relevant location-based data more efficiently, and thus, more quickly.

- 131. The claimed elements and claimed combinations of the '317 Patent were not well-understood, routine, and conventional to a skilled artisan in the relevant field.
- 132. The '317 Patent claims a mobile location aware search engine and method of providing content for same, as opposed to traditional methods of obtaining location-centric information, which relied on conventional elements and combinations.
- 133. Defendant directly infringes one or more claims of the '317 Patent without authority by using, including without limitation testing, products and systems, including by way of example, the Accused System. *See* Claim Chart for the '317 Patent, attached hereto as Exhibit L.
- 134. Defendant has been and is directly infringing, either literally or under the doctrine of equivalents, at least Claim 15 of the '317 Patent by using the Accused System. *See* Claim Chart for the '317 Patent, attached hereto as Exhibit L.
- 135. Defendant has had actual knowledge of the '317 Patent at least as early as the date of service of the original Complaint.
- 136. Defendant's acts of infringement have occurred within this District and elsewhere throughout the United States.

COUNT V: INFRINGEMENT OF THE '371 PATENT

- 137. Smarter Agent repeats and re-alleges the allegations of the above paragraphs as if fully set forth herein.
 - 138. The '371 Patent includes 6 claims. '371 Patent, Ex. E at 12:25–13:2.
- 139. The patented systems and methods make location-based search queries more efficient by allowing, for a location-based search focused in time and occurring at a specific location, a user to focus a location-based search query without leaving the context of the location-based search. *E.g.*, '371 Patent, Ex. E at 6:39–44 ("At an operation 204, user's 106 location (i.e., geographic position, latitude/longitude) is determined using one of the methods described above. At an operation 206,

wireless device 102 provides the geographic position information to location-centric information system 110."), 6:45–50 ("In an operation 208, location-centric information system 110 may retrieve location-centric information from database 112 based on the geographic position information provided by wireless device 102. In one embodiment, location-centric information system 110 also retrieves a location identifier from database 112."); 7:63–8:1 ("Geographic position information of wireless device 102 may be attributed to a distinct landmark within location-centric information system 110. In that case, location-centric information system 110 may only transmit to wireless device 102 a single location identifier. In such an embodiment, user 106 would then select the single location identifier."); 8:25–28 ("When wireless device 102 receives the location-centric information in an operation 214, user 106 is able to manipulate the location-centric information to obtain location-centric information relevant to user 106.").

- 140. Among the specific technologic improvements directed to devices used for providing information based on geographic position, the '371 Patent describes systems and methods that improve a user interface to a location-based search engine, making information retrieval more streamlined and efficient. *E.g.*, '371 Patent, Ex. E at 8:25–28 ("When wireless device 102 receives the location-centric information in an operation 214, user 106 is able to manipulate the location-centric information to obtain location-centric information relevant to user 106.").
- 141. Among the specific technologic improvements to a user interface for location-based search engines, the '371 Patent claims systems and methods that improve the user interface in such a manner that a user may more efficiently, and thus more quickly, discover relevant location-based information. *E.g.*, '371 Patent, Ex. E at 12:25–53 (Claim 1) ("receiving at said handheld wireless device location-centric information from said information system, said location-centric information related to a landmark for sale located proximate to said geographic position of said handheld

wireless device within the predetermined radial distance, said location-centric attribute information including indicia of a plurality of features related to said landmark for sale.").

- 142. Allowing a user to focus a location-based search query while remaining within the context of an initial location-based search enables the user to discover relevant location-based data more efficiently, and thus, more quickly.
- 143. The claimed elements and claimed combinations of the '371 Patent were not well-understood, routine, and conventional to a skilled artisan in the relevant field.
- 144. The '371 Patent claims a mobile location aware search engine and method of providing content for same, as opposed to traditional methods of obtaining location-centric information, which relied on conventional elements and combinations.
- 145. Defendant directly infringes one or more claims of the '371 Patent without authority by using, including without limitation testing, products and systems, including by way of example, the Accused System. *See* Claim Chart for the '371 Patent, attached hereto as Exhibit M.
- 146. Defendant has been and is directly infringing, either literally or under the doctrine of equivalents, at least Claim 1 of the '371 Patent by using the Accused System. *See* Claim Chart for the '371 Patent, attached hereto as Exhibit M.
- 147. Defendant has had actual knowledge of the '371 Patent at least as early as the date of service of the original Complaint.
- 148. Defendant's acts of infringement have occurred within this District and elsewhere throughout the United States.

COUNT VI: INFRINGEMENT OF THE '333 PATENT

- 149. Smarter Agent repeats and re-alleges the allegations of the above paragraphs as if fully set forth herein.
 - 150. The '333 Patent includes 12 claims. '333 Patent, Ex. F at 12:56–14:41.

- 151. The patented systems and methods make location-based search queries more efficient by allowing, for a location-based search focused in time and occurring at a specific location, a user to focus a location-based search query without leaving the context of the location-based search. E.g., '333 Patent, Ex. E at 6:65–7:2 ("At an operation 204, user's 106 location (i.e., geographic position, latitude/longitude) is determined using one of the methods described above. At an operation 206, wireless device 102 provides the geographic position information to location-centric information system 110."), 7:3–5 ("In an operation 208, location-centric information system 110 may retrieve location-centric information from database 112 based on the geographic position information provided by wireless device 102. In one embodiment, location-centric information system 110 also retrieves a location identifier from database 112."); 8:23–27 ("Geographic position information of wireless device 102 may be attributed to a distinct landmark within location-centric information system 110. In that case, location-centric information system 110 may only transmit to wireless device 102 a single location identifier. In such an embodiment, user 106 would then select the single location identifier."); 8:54–58 ("When wireless device 102 receives the location-centric information in an operation 214, user 106 is able to manipulate the location-centric information to obtain location-centric information relevant to user 106.").
- 152. Among the specific technologic improvements directed to devices used for providing information based on geographic position, the '333 Patent describes systems and methods that improve a user interface to a location-based search engine, making information retrieval more streamlined and efficient. *E.g.*, '333 Patent, Ex. E at 8:54–57 ("When wireless device 102 receives the location-centric information in an operation 214, user 106 is able to manipulate the location-centric information to obtain location-centric information relevant to user 106.").
- 153. Among the specific technologic improvements to a user interface for location-based search engines, the '333 Patent claims systems and methods that improve the user interface in such a

manner that a user may more efficiently, and thus more quickly, discover relevant location-based information. *E.g.*, '333 Patent, Ex. E at 13:37–14:23 (Claim 7) ("sending to said handheld wireless device from said information system, data associated with a plurality of icons, each icon from the plurality of icons being configured to provide a criteria for a search for a landmark for sale from said plurality of landmarks for sale within a distance from said geographic position of said handheld wireless device").

- 154. Allowing a user to focus a location-based search query while remaining within the context of an initial location-based search enables the user to discover relevant location-based data more efficiently, and thus, more quickly.
- 155. The claimed elements and claimed combinations of the '333 Patent were not well-understood, routine, and conventional to a skilled artisan in the relevant field.
- 156. The '333 Patent claims a mobile location aware search engine and method of providing content for same, as opposed to traditional methods of obtaining location-centric information, which relied on conventional elements and combinations.
- 157. Defendant directly infringes one or more claims of the '333 Patent without authority by using, including without limitation testing, products and systems, including by way of example, the Accused System. *See* Claim Chart for the '333 Patent, attached hereto as Exhibit N.
- 158. Defendant has been and is directly infringing, either literally or under the doctrine of equivalents, at least Claim 7 of the '333 Patent by using the Accused System. *See* Claim Chart for the '333 Patent, attached hereto as Exhibit N.
- 159. Defendant has had actual knowledge of the '333 Patent at least as early as the date of service of the original Complaint.
- 160. Defendant's acts of infringement have occurred within this District and elsewhere throughout the United States.

COUNT VII: INFRINGEMENT OF THE '795 PATENT

- 161. Smarter Agent repeats and re-alleges the allegations of the above paragraphs as if fully set forth herein.
 - 162. The '795 Patent includes 22 claims. '795 Patent, Ex. G at 7:56–10:23.
- 163. The '795 Patent claims specific technologic improvements directed to devices used for providing information based on geographic position. *E.g.*, '795 Patent, Ex. G at 3:59–61 ("A system includes a location aware search engine that identifies a user's geographic location and then delivers information associated with a landmark at that location to the user.").
- 164. Among the specific technologic improvements directed to devices used for providing information based on geographic position, the '795 Patent describes systems and methods that make information storage and retrieval more streamlined and efficient. *E.g.*, '795 Patent, Ex. G at 4:11–17 ("A mobile or wireless device can be used to access a database to search for information, promotions, and events at landmarks relative to where the user is physically located. The system requires *limited typing* as the system uses location-detecting technology, such as through an operative communication with a GPS satellite, to identify where the user is standing.") (emphasis added).
- 165. Among the specific technologic improvements to location-based search engines, the '795 Patent claims a method that makes location-based search queries more efficient and, therefore, faster. *E.g.*, '795 Patent, Ex. G at 10:1–23 (Claim 22) ("wherein the data input by a user is *automatically associated* with the geographic position *substantially simultaneously with the data being input by the user*.") (emphasis added).
- 166. The patented method makes location-based search queries more efficient by automatically associating user-input data with a user's geographic position in real-time or near real-time with the user input. *E.g.*, '795 Patent, Ex. G at 7:35–40 ("At step 62 the user can input data into

the device via a user interface (e.g., keypad, stylus, touch-screen), and at step 64 the device 20 can transmit the data to the database 26. This allows information about a landmark to be loaded into the database in real-time and made available to other users of the database 26 as described above.").

- 167. Associating user-input data with a user's geographic position in real-time or near real-time with the user input enables a location-based search query to combine user-input data and geographic location into a single associative database query.
- 168. Among the specific technologic improvements to location-based search databases, the '795 Patent claims a system that stores and retrieves results to location-based search queries more efficiently and, therefore, faster. *E.g.*, '795 Patent, Ex. G at 9:1–19 (Claim 17) ("the information database configured to *automatically associate* the data with geographic position *substantially simultaneously with the transmitted data being uploaded* to the database.") (emphasis added).
- 169. The patented system makes location-based search databases more efficient by automatically associating user-input data with the geographic position at substantially the same time the user data is uploaded to the database. By associating user-input data with geographic position data, the search query submitted to the database combines user-input data and geographic position data as a single query, allowing the database to be efficiently indexed according to an association of data types and geographic position.
- 170. The claimed elements and claimed combinations were not well-understood, routine, and conventional to a skilled artisan in the relevant field. *E.g.*, '795 Patent, Ex. G at 9:1–19 (Claim 17) ("the information database configured to *automatically associate* the data with geographic position *substantially simultaneously with the transmitted data being uploaded* to the database.") (emphasis added).
- 171. The '795 Patent claims a mobile location aware search engine and method of providing content for same, as opposed to traditional methods of obtaining location-centric

information, which relied on conventional elements and combinations. For example, the "traditional methods of obtaining such information include using printed materials such as guide books, maps, etc., communicating with people knowledgeable about the particular location, and researching the particular location either before or after being physically present at the location." '795 Patent, Ex. G at 1:65–2:3; *see also id.* at 2:4–8 ("Such methods of obtaining information may significantly detract from the person's ability to appreciate or experience the location at which they are present. Put more simply, the person may not be able to gather or access enough information about the location because it is not readily available."), 2:9–14 ("Additionally, the person may not be able to access information about the location that is based on time. For example, if a person is visiting a famous landmark at a time when there are no tour guides available and the local gift shop is closed, the person may not be able to obtain valuable information about the landmark.").

- 172. The '795 Patent describes systems that *improve* location-aware search. *E.g.*, '795 Patent, Ex. G at 7:35–40 ("At step 62 the user can input data into the device via a user interface (e.g., keypad, stylus, touch-screen), and at step 64 the device 20 can transmit the data to the database 26. This allows information about a landmark to be loaded into the database *in real-time* and made available to other users of the database 26 as described above.") (emphasis added).
- 173. The claims of the '795 Patent are not directed to a method of organizing human activity, nor are they directed to a fundamental economic practice long prevalent in our system of commerce. *E.g.*, '795 Patent, Ex. G at 7:7–18 ("At step 50 a geographic position of a wireless device 20 operated by a user 34 is identified. As described above, this identification can include communication with a GPS satellite to identify longitude and latitude coordinates for the geographic position of the device 20. The geographic position can then be transmitted to a database 26 at step 52. At step 54, data associated with one or more landmarks at the geographic position is received at the device 20 from the database 26. The data can be automatically transmitted from the database 26

to the device 20 based on the geographic position of the device 20."); 7:35–40 ("At step 62 the user can input data into the device via a user interface (e.g., keypad, stylus, touch-screen), and at step 64 the device 20 can transmit the data to the database 26. This allows information about a landmark to be loaded into the database *in real-time* and made available to other users of the database 26 as described above.") (emphasis added).

- limitations on location-aware search and how to provide content for a location-aware search, as well as improving the efficiency of a database through better indexing. *E.g.*, '795 Patent, Ex. G at 4:11–17 ("A mobile or wireless device can be used to access a database to search for information, promotions, and events at landmarks relative to where the user is physically located. The system requires *limited typing* as the system uses location-detecting technology, such as through an operative communication with a GPS satellite, to identify where the user is standing.") (emphasis added).
- 175. Defendant directly infringes one or more claims of the '795 Patent without authority by using, including without limitation testing, products and systems, including by way of example, the Accused System. *See* Claim Chart for the '795 Patent, attached hereto as Exhibit O.
- 176. Defendant has been and is directly infringing, either literally or under the doctrine of equivalents, at least Claim 17 of the '795 Patent by using the Accused System. *See* Claim Chart for the '795 Patent, attached hereto as Exhibit O.
- 177. Defendant has had actual knowledge of the '795 Patent at least as early as the date of service of the original Complaint.
- 178. Defendant's acts of infringement have occurred within this District and elsewhere throughout the United States.

COUNT VIII: INFRINGEMENT OF THE '199 PATENT

- 179. Smarter Agent repeats and re-alleges the allegations of the above paragraphs as if fully set forth herein.
 - 180. The '199 Patent includes 22 claims. '199 Patent, Ex. H at 7:63–10:22.
- 181. The '199 Patent claims specific technologic improvements directed to devices used for providing information based on geographic position. *E.g.*, '199 Patent, Ex. H at 3:65–67 ("A system includes a location aware search engine that identifies a user's geographic location and then delivers information associated with a landmark at that location to the user.").
- 182. Among the specific technologic improvements directed to devices used for providing information based on geographic position, the '199 Patent describes systems and methods that make information storage and retrieval more streamlined and efficient. *E.g.*, '199 Patent, Ex. H at 4:17–23 ("A mobile or wireless device can be used to access a database to search for information, promotions, and events at landmarks relative to where the user is physically located. The system requires *limited typing* as the system uses location-detecting technology, such as through an operative communication with a GPS satellite, to identify where the user is standing.") (emphasis added).
- 183. Among the specific technologic improvements to location-based search engines, the '199 Patent claims a method that makes location-based search queries more efficient and, therefore, faster. *E.g.*, '199 Patent, Ex. H at 10:1–10 (Claim 19) ("wherein the data input by a user is *automatically associated* with the geographic position *substantially simultaneously with the data being input by the user*.") (emphasis added).
- 184. The patented method makes location-based search queries more efficient by automatically associating user-input data with a user's geographic position in real-time or near real-time with the user input. *E.g.*, '199 Patent, Ex. H at 7:41–46 ("At step 62 the user can input data into

the device via a user interface (e.g., keypad, stylus, touch-screen), and at step 64 the device 20 can transmit the data to the database 26. This allows information about a landmark to be loaded into the database in real-time and made available to other users of the database 26 as described above.").

- 185. Associating user-input data with a user's geographic position in real-time or near real-time with the user input enables a location-based search query to combine user-input data and geographic location into a single associative database query.
- 186. Among the specific technologic improvements to location-based search databases providing results to location-based search engines, the '199 Patent claims a system that stores and retrieves results to location-based search queries more efficiently and, therefore, faster. *E.g.*, '199 Patent, Ex. H at 9:8–18 ("a wireless device configured to provide a geographic position of the wireless device to the database . . . the information database configured to *automatically associate* the data with geographic position *substantially simultaneously with the transmitted data being uploaded* to the database.") (emphasis added).
- 187. The patented system of the '199 Patent makes location-based search databases more efficient by automatically associating user-input data with the geographic position at substantially the same time the user data is being uploaded to the database. By associating user-input data with geographic position data, the search query submitted to the database combines user-input data and geographic position data as a single query, allowing the database itself to be efficiently indexed according to an association of data types and geographic position.
- 188. The claimed elements and claimed combinations of the '199 Patent were not well-understood, routine, and conventional to a skilled artisan in the relevant field. *E.g.*, '199 Patent, Ex. H at 9:8–18 ("a wireless device configured to provide a geographic position of the wireless device to the database . . . the information database configured to *automatically associate* the data with

geographic position *substantially simultaneously with the transmitted data being uploaded* to the database.") (emphasis added).

- 189. The '199 Patent claims a mobile location aware search engine and method of providing content for same, as opposed to traditional methods of obtaining location-centric information, which relied on conventional elements and combinations. For example, the "traditional methods of obtaining such information include using printed materials such as guide books, maps, etc., communicating with people knowledgeable about the particular location, and researching the particular location either before or after being physically present at the location." '199 Patent, Ex. H at 2:3–8, *see also id.* at 2:9–13 ("Such methods of obtaining information may significantly detract from the person's ability to appreciate or experience the location at which they are present. Put more simply, the person may not be able to gather or access enough information about the location because it is not readily available."); *id.* at 2:14–19 ("Additionally, the person may not be able to access information about the location that is based on time. For example, if a person is visiting a famous landmark at a time when there are no tour guides available and the local gift shop is closed, the person may not be able to obtain valuable information about the landmark.").
- 190. The '199 Patent describes systems that *improve* location-aware search. *E.g.*, '199 Patent, Ex. H at 7:41–46 ("At step 62 the user can input data into the device via a user interface (e.g., keypad, stylus, touch-screen), and at step 64 the device 20 can transmit the data to the database 26. This allows information about a landmark to be loaded into the database *in real-time* and made available to other users of the database 26 as described above.") (emphasis added).
- 191. The claims of the '199 Patent are not directed to a method of organizing human activity, nor are they directed to a fundamental economic practice long prevalent in our system of commerce. *E.g.*, '199 Patent, Ex. H at 7:13–24 ("At step 50 a geographic position of a wireless device 20 operated by a user 34 is identified. As described above, this identification can include

communication with a GPS satellite to identify longitude and latitude coordinates for the geographic position of the device 20. The geographic position can then be transmitted to a database 26 at step 52. At step 54, data associated with one or more landmarks at the geographic position is received at the device 20 from the database 26. The data can be automatically transmitted from the database 26 to the device 20 based on the geographic position of the device 20."); 7:41–46 ("At step 62 the user can input data into the device via a user interface (e.g., keypad, stylus, touch-screen), and at step 64 the device 20 can transmit the data to the database 26.").

- 192. Defendant directly infringes one or more claims of the '199 Patent without authority by using, including without limitation testing, products and systems, including by way of example, the Accused System. *See* Claim Chart for the '199 Patent, attached hereto as Exhibit P.
- 193. Defendant has been and is directly infringing, either literally or under the doctrine of equivalents, at least Claim 1 of the '199 Patent by using the Accused System. *See* Claim Chart for the '199 Patent, attached hereto as Exhibit P.
- 194. Defendant has had actual knowledge of the '199 Patent at least as early as the service of the original Complaint.
- 195. Defendant's acts of infringement have occurred within this District and elsewhere throughout the United States.

PRAYER FOR RELIEF

WHEREFORE, Smarter Agent respectfully requests that the Court enter judgment as follows:

- A. Declaring that Defendant has infringed the Patents;
- B. Awarding damages in an amount to be proven at trial, but in no event less than a reasonable royalty for Defendant's infringement including pre-judgment and post-judgment interest at the maximum rate permitted by law;

- C. Ordering an award of reasonable attorneys' fees against Defendant to Smarter Agent as provided by 35 U.S.C. § 285;
- D. Awarding expenses, costs, and disbursements in this action against Defendant, including prejudgment interest; and
- E. Ordering a permanent injunction enjoining Defendant, its officers, agents, servants, employees, attorneys, and all other persons in active concert or participation with Defendant from infringing the Patents; and
 - F. Awarding such other and further relief as the Court deems just and proper.

DEMAND FOR JURY TRIAL

Pursuant to Fed. R. Civ. P. 38, Plaintiff hereby demands trial by jury in this action of all claims so triable.

Dated: September 17, 2021 Respectfully submitted,

By: /s/Matthew C. Holohan

Jeffrey G. Toler

Texas Bar No. 24011201

jtoler@tlgiplaw.com

TOLER LAW GROUP, PC

4709 Snake Eagle Cove

Bee Cave, TX 87838

Telephone: 512-925-8779

Michael C. Smith
Texas Bar No. 18650410
Michael.smith@solidcounsel.com
Scheef & Stone, LLP
113 E. Austin Street
Marshall, TX 75671

Telephone: 903-838-8900 Facsimile: 972-767-4620

Robert R. Brunelli (Admitted *pro hac vice*) rbrunelli@sheridanross.com
Matthew C. Holohan (Admitted *pro hac vice*) mholohan@sheridanross.com
SHERIDAN ROSS P.C.

Case 6:19-cv-00182-ADA Document 63 Filed 09/17/21 Page 45 of 45

1560 Broadway, Suite 1200 Denver, CO 80202

Telephone: 303-863-9700 Facsimile: 303-863-0223 litigation@sheridanross.com

Attorneys for Plaintiff Smarter Agent, LLC