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FENWICK & WEST LLP SILICON VALLEY CENTER 801 CALIFORNIA STREET MOUNTAIN VIEW, CA 94041			RADA, ALEX P	
			ART UNIT	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

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

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

PTOC@Fenwick.com

Office Action Summary

Application No.  
15/728,462

Applicant(s)  
Golden et al.

Examiner  
ALEX P RADA

Art Unit  
3716

AIA (FITF) Status  
No

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

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) [ ] Responsive to communication(s) filed on \_\_\_\_\_.
[ ] A declaration(s)/affidavit(s) under 37 CFR 1.130(b) was/were filed on \_\_\_\_\_.
2a) [ ] This action is FINAL. 2b) [x] This action is non-final.
3) [ ] An election was made by the applicant in response to a restriction requirement set forth during the interview on \_\_\_\_\_.
4) [ ] Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims\*

- 5) [x] Claim(s) 1-20 is/are pending in the application.
5a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
6) [ ] Claim(s) \_\_\_\_\_ is/are allowed.
7) [x] Claim(s) 1-20 is/are rejected.
8) [ ] Claim(s) \_\_\_\_\_ is/are objected to.
9) [ ] Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement

\* If any claims have been determined allowable, you may be eligible to benefit from the Patent Prosecution Highway program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init\_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

- 10) [ ] The specification is objected to by the Examiner.
11) [x] The drawing(s) filed on 9 October 2017 is/are: a) [x] accepted or b) [ ] objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

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

Certified copies:

- a) [ ] All b) [ ] Some\*\* c) [ ] None of the:
1. [ ] Certified copies of the priority documents have been received.
2. [ ] Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. [ ] Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*\* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) [x] Notice of References Cited (PTO-892) 3) [ ] Interview Summary (PTO-413)
Paper No(s)/Mail Date \_\_\_\_\_
2) [ ] Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) 4) [ ] Other: \_\_\_\_\_
Paper No(s)/Mail Date \_\_\_\_\_

## DETAILED ACTION

### *Notice of Pre-AIA or AIA Status*

The present application is being examined under the pre-AIA first to invent provisions.

### *Claim Rejections - 35 USC § 101*

1. 35 U.S.C. 101 reads as follows:

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

2. Claims 1-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to abstract without significantly more. The claim(s) 1, 11 and 16 recite(s) limitations of, “receiving....location data indicating a geographic location of a mobile device associated with a player”; “retrieving....real world condition data associated with one or more real world conditions”; “determining a location for a virtual element in the virtual world based on the location data and the real world condition data”; and “transmitting....information for displaying the virtual element at the location in the virtual world.” The limitations of “receiving”, “retrieving”, “determining” and “transmitting” as disclosed above, is a process that under its broadest reasonable interpretation, covers performance of the limitation of following rules or instructions under Certain Methods of Organizing Human Activity but for the recitation of generic computer components. That is, other than “by the computing device” nothing in the claim elements precludes the steps from practically being performed as a sequence of instructions. If the claim limitations, under its broadest reasonable interpretation, covers performance of the limitations of following rules or instruction but for the recitation of generic computer component, then it falls within the “Certain Methods of Organizing Human Activity” grouping of abstract ideas. This judicial exception is not integrated into a practical

application. The claims only recite additional elements of using a server, a computer-readable medium and one or more processors to perform the “receiving”, “retrieving”, “determining”, and “transmitting” steps. The server, computer-readable medium and the one or more processors recite a high-level of generality such that it amount no more than mere instruction to apply the exception using generic computer components. Accordingly, these additional elements do not integrate the abstract idea into a practical application because it does not impose any meaningful limits on practicing the abstract idea. The claim(s) does/do not include additional elements that are sufficient to amount to significantly more than the judicial exception. Adding generic computer elements to perform generic functions that are well-understood, routine and conventional, such as gathering data, performing calculations, and outputting a result as evidence by Alice Corp., 134 S. Ct. at 2355–56 (mere instruction to implement an abstract idea (game rules) on a computer "cannot impart patent eligibility), and *Versata Dev. Group, Inc. v. SAP Am.* (Storing and retrieving information in memory) see MPEP (2106.05(d)(II), does not transform the claims into eligible subject matter. 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. In regards to mobile device, as evidence by Cliff et al. (US Pub. No. 2004/0176082) discloses that it is conventional and/or well known in the art to use mobile devices in virtual environment type application. As discussed above with respect to integration of the abstract idea into a practical application, the additional element of using a server, a computer-readable medium and one or more processors to perform the “receiving”, “retrieving”, “determining”, and “transmitting” steps amounts to no mere than mere instructions to apply the exception using generic computer components. Mere instruction to apply an exception using generic computer component cannot provide an inventive concept.

Claims 2-10, 12-15 and 17-20 each recite a further step of the abstract game method that when taken as a whole fails to contribute significantly more because each is merely another step that merely defines another rule/instruction, may be carried out by hand or in the mind as part of the overall method without integration into a practical application to any particular machine or device, improvement to any particular machine or device, or contribution of substantially more than an abstract method and generic computer components.

### ***Double Patenting***

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on nonstatutory double patenting provided the reference application or patent either is shown to be commonly owned with the examined application, or claims an invention made as a result of activities undertaken within the

scope of a joint research agreement. See MPEP § 717.02 for applications subject to examination under the first inventor to file provisions of the AIA as explained in MPEP § 2159. See MPEP §§ 706.02(l)(1) - 706.02(l)(3) for applications not subject to examination under the first inventor to file provisions of the AIA. A terminal disclaimer must be signed in compliance with 37 CFR 1.321(b).

The USPTO Internet website contains terminal disclaimer forms which may be used. Please visit [www.uspto.gov/patent/patents-forms](http://www.uspto.gov/patent/patents-forms). The filing date of the application in which the form is filed determines what form (e.g., PTO/SB/25, PTO/SB/26, PTO/AIA/25, or PTO/AIA/26) should be used. A web-based eTerminal Disclaimer may be filled out completely online using web-screens. An eTerminal Disclaimer that meets all requirements is auto-processed and approved immediately upon submission. For more information about eTerminal Disclaimers, refer to [www.uspto.gov/patents/process/file/efs/guidance/eTD-info-I.jsp](http://www.uspto.gov/patents/process/file/efs/guidance/eTD-info-I.jsp).

4. Claims 1-20 are rejected on the ground of nonstatutory double patenting as being unpatentable over claims 1-18 of U.S. Patent No. 9,782,668. Although the claims at issue are not identical, they are not patentably distinct from each other because claims 1-18 of the U.S. Patent No. 9,782,668 "anticipates" claims 1-20 of application serial number 15/728462. Accordingly, claims 1-20 of Application No. 15/728462 are not patentably distinct from claims 1-18 of U.S. Patent No. 9,782,668. Here, claims 1-18 of U.S. Patent No. 9,782,668 requires elements of claim 1, a computer-implemented method of locating virtual elements in a parallel reality game, the method comprising: hosting, by a computer system, a parallel reality game, the parallel reality game having a virtual world, the virtual world having a geography that parallels at least a portion of geography of a real world such that a player can navigate the virtual world by moving to different geographic locations in the real world; receiving, by the computer system, data indicating geographic locations of mobile devices in the real world, the mobile devices associated with a plurality of players of the parallel reality game; identifying, by the computer system, a first area in the real world as a high traffic area based on the

data indicating the geographic locations; responsive to identifying the first area as a high traffic area, determining, by the computer system, to place a virtual element at a location in the virtual world corresponding to the first area; transmitting, by the computer system to a receiving mobile device located at a second area in the real world and associated with a receiving player of the parallel reality game, information to display the virtual element at the location in the virtual world, the receiving player not included in the plurality of players and the second area not included in the first area; receiving, by the computer system, data indicating that the receiving mobile device has traveled from the second area to the first area and that the receiving player has interacted with the virtual element; and storing, by the computer system, data indicating that the receiving player has interacted with the virtual element; claim 7, a computer-based system comprising: one or more computer processors; and a non-transitory computer-readable medium storing computer-readable instructions which when executed by the one or more computer processors cause the one or more computer processors to perform operations comprising: hosting a parallel reality game, the parallel reality game having a virtual world having a geography that parallels at least a portion of the geography of a real world such that a player can navigate the virtual world by moving to different geographic locations in the real world; receiving data indicating geographic locations of mobile devices in the real world, the mobile devices associated with a plurality of players of the parallel reality game; identifying a first area in the real world as a high traffic area based on the data indicating the geographic locations; responsive to identifying the first area as a high traffic area, determining to place a virtual element at a location in the virtual world corresponding to the first area; transmitting, to a receiving mobile device located at a second area in the real world and associated with a receiving player of the parallel reality game, information to display the virtual element at the location in the virtual world, the receiving player not included in the plurality of players and the second area not included in the first area; receiving data indicating that the receiving mobile device has traveled from the second area to

the first area and that the receiving player has interacted with the virtual element; and storing data indicating that the receiving player has interacted with the virtual element; and claim 13, a tangible, non-transitory computer-readable medium storing computer-readable instructions which when executed by one or more processors cause the one or more processors to perform operations comprising: hosting a parallel reality game, the parallel reality game having a virtual world having a geography that parallels at least a portion of the geography of a real world such that a player can navigate the virtual world by moving to different geographic locations in the real world; receiving data indicating geographic locations of mobile devices in the real world, the mobile devices associated with a plurality of players of the parallel reality game; identifying a first area in the real world as a high traffic area based on the data indicating the geographic locations; responsive to identifying the first area as a high traffic area, determining to place a virtual element at a location in the virtual world corresponding to the first area; transmitting, to a receiving mobile device located at a second area in the real world and associated with a receiving player of the parallel reality game, information to display the virtual element at the location in the virtual world, the receiving player not included in the plurality of players and the second area not included in the first area; receiving data indicating that the receiving mobile device has traveled from the second area to the first area and that the receiving player has interacted with the virtual element; and storing data indicating that the receiving player has interacted with the virtual element while claims 1-20 of Application No.

15/728462 only requires elements of claim 1, a computer-implemented method of locating virtual elements in a parallel reality game, the method comprising:

hosting, at a computing device, the parallel reality game, the parallel reality game associated with the virtual world, the virtual world having a geography that parallels at least a portion of the geography of the real world such that a player can navigate the virtual world by moving to different geographic locations in the real world; receiving, by the computing device, location data indicating a geographic



location of a mobile device associated with a player; retrieving, by the computing device, real world condition data associated with one or more real world conditions;  
determining a location for a virtual element in the virtual world based ~~at least in part~~ on the location data and the real world condition data; and transmitting, by the computing device to the mobile device, information for displaying the virtual element at the location in the virtual world; claim 11, a computer-based system for implementing a parallel reality game, the computer-based system comprising: a game server operable to host a parallel reality game, the game server having one or more computer-readable media, one or more processors, and a network interface, the parallel reality game having a virtual world having a geography that parallels at least a portion of the geography of the real world such that a player can navigate the virtual world by moving to different geographic locations in the real world; the game server configured to: receive, via a network interface, location data indicating a geographic access a data source storing real world condition data associated with one or more real world conditions; determine a location for a virtual element in the virtual world based on the location data and the real world condition data; and  
transmit, to the mobile device via the network interface, information for displaying the virtual element at the location in the virtual world; and claim 16, a tangible, non-transitory computer-readable medium storing computer-readable instructions for execution by one or more processors, causing the one or more processors to perform operations for locating virtual elements in a virtual world associated with a parallel reality game, the virtual world having a geography that parallels at least a portion of the geography of the real world such that a player can navigate the virtual world by moving to different geographic locations in the real world, the operations comprising: receiving location data indicating a geographic location of a mobile device associated with a player retrieving real world condition data associated with one or more real world conditions; determining a location for a virtual element in the virtual world based on the location

data and the real world condition data; and transmitting, to the mobile device, information to display the virtual element at the location in the virtual world. Thus it is apparent that the more claims 1-18 of U.S. Patent No. 9,782,668 encompasses claims 1-20 of Application No. 15/728462. Following the rationale in *In re Goodman* cited in the preceding paragraph, where applicant has once been granted a patent containing a claim for the specific or narrower invention, applicant may not then obtain a second patent with a claim for the generic or broader invention without first submitting an appropriate terminal disclaimer.

### ***Claim Rejections - 35 USC § 102***

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

5. The following is a quotation of the appropriate paragraphs of pre-AIA 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claim(s) 1-6, 11-14 and 16-19 are rejected under pre-AIA 35 U.S.C. 102(b) as being anticipated by Mahajan et al. (US Pub. No. 2013/0005466).

Regarding claim 1, Mahajan et al. (hereafter Mahajan) discloses a computer-implemented method of locating virtual elements in a parallel reality game, the method comprising: hosting, at a computing device (Figs. 1A, 3-5 and paragraphs 48-50 & 229-241; describes the system), the parallel

reality game, the parallel reality game associated with the virtual world, the virtual world having a geography that parallels at least a portion of the geography of the real world such that a player can navigate the virtual world by moving to different geographic locations in the real world (Figs. 1A, 6D and paragraphs 79-82, 71-74 & 245; describes the movement to different geographic locations); receiving, by the computing device, location data indicating a geographic location of a mobile device associated with a player (Figs. 1A, 6D and paragraphs 74 & 245); retrieving, by the computing device, real world condition data associated with one or more real world conditions (paragraph 66; wherein the real world condition data are places or recreational or commercial value); determining a location for a virtual element in the virtual world based on the location data and the real world condition data (paragraphs 66 & 68-70; describes the location where virtual element are located); and transmitting, by the computing device to the mobile device (Figs. 1A, 6D and paragraphs 74 & 245), information for displaying the virtual element at the location in the virtual world (Figs. 2P, 2R, 2S, 6A-6K and paragraphs 79-82, 203, 205-206, 210 & 242-253; wherein the virtual element/item can be any type of incentive awards/rewards that are described in the examples).

Regarding claim 11, Mahajan discloses a computer-based system for implementing a parallel reality game, the computer-based system comprising:

a game server operable to host a parallel reality game (Fig. 1A), the game server having one or more computer-readable media, one or more processors, and a network interface, the parallel reality game having a virtual world having a geography that parallels at least a portion of the geography of the real world such that a player can navigate the virtual world by moving to different geographic locations in the real world (Figs. 1A, 3-5 and paragraphs 48-50 & 229-241; describes the system); the game server configured to: receive, via a network interface, location data indicating a geographic location of a mobile device associated with a player (Figs. 1A, 6D and paragraphs 74 &

245); access a data source storing real world condition data associated with one or more real world conditions (paragraph 66; wherein the real world condition data are places or recreational or commercial value); determine a location for a virtual element in the virtual world based on the location data and the real world condition data (paragraphs 66 & 68-70; describes the location where virtual element are located); and transmit to the mobile device via the network interface information for displaying the virtual element at the location in the virtual world (Figs. 2P, 2R, 2S, 6A-6K and paragraphs 79-82, 203, 205-206, 210 & 242-253; wherein the virtual element/item can be any type of incentive awards/rewards that are described in the examples).

Regarding claim 16, Mahajan discloses a tangible, non-transitory computer-readable medium storing computer-readable instructions for execution by one or more processors, causing the one or more processors to perform operations for locating virtual elements in a virtual world associated with a parallel reality game, the virtual world having a geography that parallels at least a portion of the geography of the real world such that a player can navigate the virtual world by moving to different geographic locations in the real world, the operations comprising: receiving location data indicating a geographic location of a mobile device associated with a player (Figs. 1A, 6D and paragraphs 74 & 245); retrieving real world condition data associated with one or more real world conditions (paragraph 66; wherein the real world condition data are places or recreational or commercial value); determining a location for a virtual element in the virtual world based on the location data and the real world condition data (paragraphs 66 & 68-70; describes the location where virtual element are located); and transmitting to the mobile device information to display the virtual element at the location in the virtual world (Figs. 2P, 2R, 2S, 6A-6K and paragraphs 79-82, 203, 205-206, 210 & 242-253; wherein the virtual element/item can be any type of incentive awards/rewards that are described in the examples).

Regarding claims 2, 12 and 17, Mahajan discloses wherein the real world condition data comprises data associated with aggregate locations of a plurality of individuals in the real world and the location of the virtual element is one with high individual traffic (Figs.2P, 2R, 2S, 6A-6K and paragraphs 79-82, 203 & 205-206; describes high traffic area based on identified data, such a location-based action of a first group of player having a level of influence over a location (e.g., location 115) that is greater than a level of influence, location-based action of a second group of players over the location as one example and wherein the virtual element/item can be any type of incentive awards/rewards that are described in the examples).

Regarding claims 3, 13 and 18, Mahajan discloses wherein the data associated with the aggregate locations of the plurality of individuals comprises a heat map generated based on the locations of the plurality of individuals in the real world (Figs. 6D and paragraph 245; wherein the heat map is the display of information about a location, a boss of the location or a mob (or group of players) with which a boss of a location is affiliated).

Regarding claims 4, 14 and 19, Mahajan discloses wherein determining the location for the virtual element comprises: determining a number of individuals in an area that includes the location based on the real world condition data; and determining the location is one with high individual traffic if the number of individuals in the area exceeds a threshold (Figs.2P, 2R, 2S, 6A-6K and paragraphs 203, 205-206 & 210; wherein when the high traffic area is a first group of player having a level of influence over a location (e.g., location 115) that is greater than a level of influence, location-based action of a second group of players over the location as one example).

Regarding claim 5, Mahajan discloses wherein the real world condition data comprises data associated with one or more of locations of cultural, recreational, or commercial value (paragraph 66).

Regarding claim 6, Mahajan discloses wherein the real world condition data comprises road map data (Fig. 6D and paragraph 245).

### ***Claim Rejections - 35 USC § 103***

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

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

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 7 is/are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Mahajan et al. (US Pub. No. 2013/005466) in view of Gahlings (US Pub. No. 2013/0227017).

Regarding claim 7, Gahlings discloses the claimed invention as discussed above however silent in regards to wherein the real world condition data comprises hazard data.

Gahlings teaches a system and method for social and data communication that uses physical location. Gahlings further teaches that a user may set up filters to filter information displayed to the user. The filters may filter the type of data to be displayed. For example, the user may only wish to see social communications, historical data, geographical data, hazard/warning data, traffic data, business data, reviews and/or the like. In one embodiment, the user may identify/select a route on a map or the like and may retrieve data tagged to locations along the route and/or proximal to the

route. In this way, the user may, in real-time determine what is happening on a proposed route, i.e. may identify hazards, traffic congestions, social events and/or the like taking place along a route. In some aspects, a user may select a business or a landmark and see what occurrences are happening at the business or landmark. Gahlings further teaches that the user may be able to view reviews of events, services as they occur. Moreover, the user can access these real-time reviews using only location data. As noted above, filters may be applied so that a user only receives data tagged to locations proximal to the user. In this way, locational boundaries may be put around the social interactions (paragraphs 34 and 45). By having hazard data, one of ordinary skill in the art would provide users to identify/select/create a route and filter broadcast information so that only the information concerning hazards, driving conditions and/or the like are displayed, thus allowing the user to avoid potential dangerous conditions/environments along the route to his/her desired destination/location.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Mahajan to include hazard data as taught by Gahlings to provide users to identify/select/create a route and filter broadcast information so that only the information concerning hazards, driving conditions and/or the like are displayed, thus allowing the user to avoid potential dangerous conditions/environments along the route to his/her desired destination/location.

9. Claims 8-9 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Mahajan et al. (US Pub. No. 2013/005466) in view of Bokor et al. (US Pub. No. 2010/0050237).

Regarding claims 8 and 9, Mahajan discloses the claimed invention as discussed above however silent in regards to claim 8, wherein the real world condition data comprises weather data and claim 9, wherein the real world condition data comprises calendar data.

Bokor et al. (hereafter Bokor) teaches generating user and avatar specific content in a virtual world may include generating a local attribute object associated with the user's avatar in the virtual world. The attributes may be dynamic and comprised of information detected in real time, or automatically, upon the occurrence of a defined trigger or triggering event, such as user log in, user request, authorized service provider request, or authorized service provider automatically receiving information based on a user or user's avatar's location. Automatically detected information may be comprised of information from sources such as, but not limited to, the user's internet protocol (IP) address, coordinates received from a global positioning system (GPS), coordinates received from a triangulation unit associated with a wireless communications device, or electronic feed from a weather station, a clock and/or a calendar. In some embodiments, the local attribute object may be comprised of both static and dynamic attributes (paragraphs 3-7, 23 and 33). Examples of environmental characteristics of the service provider's virtual world space may include elements making up the virtual world space, features of a virtual world retail store, such as displays, automated avatars to assist the user's avatar or other features, language employed in the store, currency utilized in the store, and weather conditions outside the store. Configuration of the virtual world space may be dynamically adjusted according to a set of predetermined parameters. The predetermined parameters may be based on the number of avatars present in the virtual world space at a given time. By having weather and calendar data, one of ordinary skill in the art would enable the generation of user and avatar specific content based on the local attribute object such as, the user's internet protocol (IP) address, coordinates received from a global positioning system (GPS), coordinates received from a triangulation unit associated with a wireless communications device, or electronic feed from a weather station, a clock and/or a calendar, to provide a more in depth virtual environment that mimics real world conditions.



Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Mahajan to include weather and calendar data as taught by Bokor to enable the generation of user and avatar specific content based on the local attribute object such as, the user's internet protocol (IP) address, coordinates received from a global positioning system (GPS), coordinates received from a triangulation unit associated with a wireless communications device, or electronic feed from a weather station, a clock and/or a calendar, to provide a more in depth virtual environment that mimics real world conditions.

10. Claims 10, 15 and 20 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Mahajan et al. (US Pub. No. 2013/005466) in view of Kolo et al. (US Pub. No. 2012/0244945).

Regarding claim 10, Mahajan further discloses determine the location for the virtual element as discussed above however silent in regards to predicting a player's travel path in the virtual world based on the geographic location of the mobile device associated with the player; and selecting a location in the virtual world in the player's travel path as the location.

Kolo et al. (hereafter Kolo) teaches a system and method for incorporating geolocation information into an online game to enhance the enjoyment of the online game. The geolocation of a player is communicated to the online game servers which modify the gaming environment of the player based on the player's current geolocation. If the player changes geolocation, the online game may modify the player's gaming experience as the player's geolocation changes. Kolo further teaches predicting a player's travel path in the virtual world based on the geographic location of the mobile device associated with the player and selecting a location in the virtual world in the player' travel path as the location (Fig. 29 and paragraphs 361-364). By modifying the players gaming experience based on the geolocation of the player may receive additional health benefits when the payer is geolocated near a hospital or health food store and alternatively, a player may receive a strength bonus when located near a gym as an example (paragraphs 72-75).

By predicting a player's travel path in the virtual world based on geographic location of the mobile device associated with the player, one of ordinary skill in the art would provide an enhanced gaming experience by modifying the player's gaming experience as the player's geolocation changes.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Mahajan to include predicting a player's travel path in the virtual world based on the geographic location of the mobile device associated with the player; and selecting a location in the virtual world in the player's travel path as the location as taught by Kolo to provide an enhanced gaming experience by modifying the player's gaming experience as the player's geolocation changes.

### ***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEX P RADA whose telephone number is (571)272-4452. The examiner can normally be reached on M-F 8-5.

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

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dmitry Suhol can be reached on 571-272-4430. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A.P.R./

Examiner, Art Unit 3716

/Jay Trent Liddle/

Primary Examiner, Art Unit 3716

## **REMARKS**

Claims 1–20 were pending in this application, and claims 1, 11, and 16 were the independent claims. Claims 1, 11, 16, and 17 are amended herein.

### **STATEMENT OF SUBSTANCE OF INTERVIEW**

Applicant’s representatives John Kind (Reg. No. 70,670) and Bailey Meyer conducted a telephonic interview with Examiner Rada on May 7, 2019. During the interview, pending claim 1 and the rejections to those claims under 35 U.S.C. § 102 in light of references Mahajan were discussed. No formal agreement was reached, but the examiner indicated that the discussed amendments would require further search and consideration.

### **REJECTIONS UNDER 35 U.S.C. § 101**

Claims 1–20 were rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter. In view of the following, these rejections should be withdrawn.

Under the new guidance released by the United States Patent and Trademark Office on January 7, 2019, the claims must be examined using a two-pronged analysis under Step 2A. *See* “2019 Revised Patent Subject Matter Eligibility Guidance” (henceforth “January Guidance”). The examiner alleges that the claimed subject matter is directed to “following rules or instructions under Certain Methods of Organizing Human Activity but for recitation of generic computer components.” OA, p. 2. However, the claimed subject matter is non-abstract as it does not merely recite an abstract idea a method of organizing human activity.

#### **Step 2A, Prong One**

Under Prong One, “examiners should evaluate whether the claim recites a judicial exception, *i.e.*, an abstract idea, a law of nature, or a natural phenomenon.” *See* January

Guidance, p. 54. Claim 1 does not recite an abstract idea. Rather, claim 1 recites a method for using location data and real world condition data to determine “a location for a virtual element in the virtual world,” “add... the location for the virtual element to a game database,” and “transmit[], by the server to other mobile devices associated with other players, information for displaying the virtual element at the location in the virtual world.” Through these steps, the method of claim 1 incorporates the real world further into the virtual world of the parallel reality game. This could not be done in the human mind, nor does it describe a mathematical formula or organization of human activity.

The Office Action asserts that claim 1 pertains to certain methods of organizing human activity. OA, p. 2. However, claim 1 does not recite a method of organizing of human activity. The steps of claim 1 describe, among other things, “determining... a location for a virtual element in the virtual world” and “transmitting... information for displaying the virtual element at the determined location in the virtual world.” While the method may be implemented in the context of a parallel-reality game, nothing in claim 1 creates a legal obligation nor directs humans to behave in any particular way. Rather, the claim describes how to add virtual elements to a virtual world based on location data and real world condition data. In other words, the focus of the claim is the virtual world itself, not the players who ultimately interact with it

In sum, claim 1 does not recite an abstract idea. Therefore, claim 1, and claims 11 and 16, which recite similar subject matter, are directed to patent eligible subject matter. The dependent claims are also eligible by virtue of their dependency.

#### Step 2A, Prong Two

Under Prong Two, “[a] claim is not ‘directed to’ a judicial exception, and thus is patent eligible, if the claim as a whole integrates the recited judicial exception into a practical

application of that exception.” See January Guidance, p. 53. Even if claim 1 did recite an abstract idea, which applicant does not concede, it includes additional elements that integrate any underlying abstract ideas into a practical application. For example, claim 1 recites, *inter alia*, “updating the game database to include the virtual element at the determined location” and “transmitting, by the server to other mobile devices associated with other players, information for displaying the virtual element at the determined location in the virtual world.” In this way, the method of claim 1 updates the virtual world of the parallel reality game through “updating the game database to include the virtual element at the determined location” and “transmitting... information for displaying the virtual element at the determined location.” Therefore, claim 1, and claims 11 and 16, which recite similar subject matter, are not “directed to” the judicial exception. The dependent claims are also eligible by virtue of their dependency.

Therefore, in view of these amendments, the Applicant respectfully requests withdrawal of the rejection.

#### **REJECTIONS UNDER 35 U.S.C. § 102 and/or 35 U.S.C. § 103**

Claims 1–6, 11–14, and 16–19 were rejected under 35 U.S.C. § 102(b) as anticipated by Mahajan et al. (US Pub. No. 2013/0005466). Claim 7 was rejected under 35 U.S.C. § 103(a) as unpatentable over Mahajan et al. (US Pub. No. 2013/005466) in view of Gahlmgs (US Pub. No. 2013/0227017). Claims 8–9 were rejected under 35 U.S.C. § 103(a) as unpatentable over Mahajan et al. (US Pub. No. 2013/005466) in view of Bokor et al. (US Pub. No. 2010/0050237). Claims 10, 15, and 20 were rejected under 35 U.S.C. § 103(a) as unpatentable over Mahajan et al. (US Pub. No. 2013/005466) in view of Kolo et al. (US Pub. No. 2012/0244945). These rejections are respectfully traversed.

Claim 1 has been amended for clarity to recite:

hosting, at a server, the parallel reality game, the parallel reality game including interactions with virtual elements in the virtual world stored in a game database, the virtual world having a geography that parallels at least a portion of the geography of the real world such that a player can navigate the virtual world by moving to different geographic locations in the real world;

receiving, at the server, location data indicating a geographic location of a mobile device associated with a player;

retrieving, by the server, real world condition data associated with one or more real world conditions;

determining, based on the location data and the real world condition data, a location for a virtual element in the virtual world;

updating the game database to include the virtual element at the determined location; and

transmitting, by the server to other mobile devices associated with other players, information for displaying the virtual element at the determined location in the virtual world.

Mahajan generally discloses a method of updating virtual worlds based on interactions between real-world items. *See* Mahajan, Abstract. The Office Action asserts that Mahajan at [0066] and [0068]-[0070] describes the claim element “determining a location for a virtual element in the virtual world based on the location data and the real world condition.” However, Mahajan merely describes locations, which are “specific physical place[s] in the real world.” Mahajan, [0066].

This differs from the subject matter of claim 1. In particular, claim 1 recites that a “location for a virtual element in the virtual world” is determined “based on **the location data** and the real world condition data.” The location data indicates “a geographic location of a mobile device associated with a player.” Thus, claim 1 includes selecting the location of a virtual element based on the geographic location of a player’s mobile device. In contrast, Mahajan makes no mention of considering a player’s location when determining the location of

virtual elements. Rather, the virtual elements are at pre-determined locations that are “specific physical place[s] in the real world.” Mahajan, [0066].

In view of these arguments, claim 1, and claims 11 and 16, which recite similar subject matter, are patentable over Mahajan. The dependent claims are also patentable by virtue of their dependency. The other cited references do not remedy these deficiencies of Mahajan. Therefore, these rejections should be withdrawn.

### **DOUBLE PATENTING REJECTION**

Claims 1-20 are rejected on the ground of nonstatutory double patenting as being unpatentable over claims 1-18 of U.S. Patent No. 9,782,668. Applicant will file a terminal disclaimer.



**CONCLUSION**

Based on the foregoing, the application is in condition for allowance of all claims, and a Notice of Allowance is respectfully requested. If the examiner believes for any reason direct contact would help advance the prosecution of this case to allowance, the examiner is encouraged to telephone the undersigned at the number given below.

If extensions of time are necessary to prevent abandonment of this application, then such extension of time are hereby petitioned under 37 CFR 1.136(a), and any fees required therefore are hereby authorized to be charged to our Deposit Account 19-2555.

Respectfully submitted,

Dated: May 20, 2019

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## AMENDMENTS TO THE CLAIMS

All pending claims, along with a current status of each, is reproduced below. If indicated, please amend the claims accordingly.

1. (Currently Amended) A computer-implemented method of locating virtual elements in a virtual world associated with a parallel reality game, the method comprising:  
hosting, at a ~~server-computing device~~, the parallel reality game, the parallel reality game including interactions with virtual elements in the virtual world stored in a game database associated with the virtual world, the virtual world having a geography that parallels at least a portion of the geography of the real world such that a player can navigate the virtual world by moving to different geographic locations in the real world;  
receiving, ~~at the server by the computing device~~, location data indicating a geographic location of a mobile device associated with a player;  
retrieving, by the ~~server-computing device~~, real world condition data associated with one or more real world conditions;  
determining, based on the location data and the real world condition data, a location for a virtual element in the virtual world ~~based on the location data and the real world condition data~~;  
updating the game database to include the virtual element at the determined location; and  
transmitting, by the ~~server computing device~~ to other [[the]] mobile devices associated with other players ~~device~~, information for displaying the virtual element at the determined location in the virtual world.

2. (Previously presented) The computer-implemented method of claim 1, wherein the real world condition data comprises data associated with aggregate locations of a plurality of individuals in the real world, and the location of the virtual element is one with high individual traffic.

3. (Previously presented) The computer-implemented method of claim 2, wherein the data associated with the aggregate locations of the plurality of individuals comprises a heat map generated based on the locations of the plurality of individuals in the real world.

4. (Previously presented) The computer-implemented method of claim 2, wherein determining the location for the virtual element comprises:

determining a number of individuals in an area that includes the location based on the real world condition data; and

determining the location is one with high individual traffic if the number of individuals in the area exceeds a threshold.

5. (Previously presented) The computer-implemented method of claim 1, wherein the real world condition data comprises data associated with one or more of locations of cultural, recreational, or commercial value.

6. (Previously presented) The computer-implemented method of claim 1, wherein the real world condition data comprises road map data.

7. (Previously presented) The computer-implemented method of claim 1, wherein the real world condition data comprises hazard data.

8. (Previously presented) The computer-implemented method of claim 1, wherein the real world condition data comprises weather data.

9. (Previously presented) The computer-implemented method of claim 1, wherein the real world condition data comprises event calendar data.

10. (Previously presented) The computer-implemented method of claim 1, wherein determining the location for the virtual element comprises:

predicting a player's travel path in the virtual world based on the geographic location of the mobile device associated with the player; and  
selecting a location in the virtual world in the player's travel path as the location.

11. (Currently Amended) A computer-based system for implementing a parallel reality game, the computer-based system comprising:

a game server operable to host a parallel reality game, the game server having one or more computer-readable media, one or more processors, and a network interface, the parallel reality game including interactions with virtual elements in a virtual world stored in a game database, the ~~having a~~ virtual world having a geography that parallels at least a portion of the geography of the real world such that a player can navigate the virtual world by moving to different geographic locations in the real world;

the game server configured to:

receive, via a network interface, location data indicating a geographic location of a mobile device associated with a player;

access a data source storing real world condition data associated with one or more real world conditions;

determine, based on the location data and the real world condition data, a location for a virtual element in the virtual world ~~based on the location data and the real world condition data;~~ and

update the game database to include the virtual element at the determined location; and

transmit, to ~~[[the]] other mobile devices associated with other players device~~ via the network interface, information for displaying the virtual element at the determined location in the virtual world.

12. (Previously presented) The computer-based system of claim 11, wherein the real world condition data comprises data associated with aggregate locations of a plurality of individuals in the real world, and the location of the virtual element is one with high individual traffic.

13. (Previously presented) The computer-based system of claim 12, wherein the data associated with the aggregate locations of the plurality of individuals comprises a heat map generated based on the locations of the plurality of individuals in the real world.

14. (Previously presented) The computer-based system of claim 12, wherein the game server determines the location for the virtual element by performing operations including:  
determining a number of individuals in an area that includes the location based on the real world condition data; and  
determining the location is one with high individual traffic if the number of individuals in the area exceeds a threshold.

15. (Previously presented) The computer-based system of claim 11, wherein the game server determines the location for the virtual element by performing operations including:  
predicting a player's travel path in the virtual world based on the geographic location of the mobile device associated with the player; and  
selecting a location in the virtual world in the player's travel path as the location.

16. (Currently Amended) A tangible, non-transitory computer-readable medium storing computer-readable instructions for execution by one or more processors, causing the one or more processors to perform operations for locating virtual elements in a virtual world associated with a parallel reality game, the parallel reality game including interactions with virtual elements in the virtual world stored in a game database, the virtual world having a geography that parallels at least a portion of the geography of the real world such that a player can navigate the virtual world by moving to different geographic locations in the real world, the operations comprising:

receiving location data indicating a geographic location of a mobile device associated with a player;

retrieving real world condition data associated with one or more real world conditions;

determining, based on the location data and the real world condition data, a location for a virtual element in the virtual world ~~based on the location data and the real world condition data~~; and  
updating the game database to include the virtual element at the determined location; and  
transmitting, to ~~[[the]] other mobile device devices associated with other players~~, information to display the virtual element at the determined location in the virtual world.

17. (Currently Amended) The tangible, non-transitory computer-readable medium of claim 16, wherein the real world condition data comprises data associated with aggregate locations of a plurality of individuals in the real world, and the location of the virtual element is one with ~~[[with]]~~ high individual traffic.

18. (Previously presented) The tangible, non-transitory computer-readable medium of claim 17, wherein the data associated with the aggregate locations of the plurality of individuals comprises a heat map generated based on the locations of the plurality of individuals in the real world.

19. (Previously presented) The tangible, non-transitory computer-readable medium of claim 17, wherein determining the location for the virtual element comprises:

determining a number of individuals in an area that includes the location based on the real world condition data; and

determining the location is one with high individual traffic if the number of individuals in the area exceeds a threshold.

20. (Previously presented) The tangible, non-transitory computer-readable medium of claim 16, wherein determining the location for the virtual element comprises:

- predicting a player's travel path in the virtual world based on the geographic location of the mobile device associated with the player; and
- selecting a location in the virtual world in the player's travel path as the location.