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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/802,016	07/17/2015	Chetan Parshottam Bhadracha	GGL-1013	1768

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Greenville, SC 29602

EXAMINER

MALLEY SR., DANIEL P

ART UNIT	PAPER NUMBER
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3648

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PAPER

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.

Office Action Summary	Application No. 14/802,016	Applicant(s) BHADRICHA ET AL.	
	Examiner DANIEL P. MALLEY SR.	Art Unit 3648	AIA (First Inventor to File) Status Yes

-- 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 7/17/2015.
☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ 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 ____; the restriction requirement and election have been incorporated into this action.
- 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) ☒ Claim(s) 1-15 is/are pending in the application.
5a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 1-15 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) ☒ The drawing(s) filed on 7/17/2015 is/are: a) ☒ 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) ☒ 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)
Paper No(s)/Mail Date <u>7/17/2015; 11/15/2016</u> . | 4) ☐ Other: ____. |

DETAILED ACTION

Notice of Pre-AIA or AIA Status

1. The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

Claim Objections

2. ***Claims 10, 14 and 15 objected to under 37 CFR 1.75(c)*** because the claims in question are presented in dependent form but refer forward to subsequent claims; Rule 1.75(c) requires that dependent claims *refer back* to, and further limit, a previous claim or claims in the application. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112(a):

(a) IN GENERAL.—The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor or joint inventor of carrying out the invention.

The following is a quotation of the first paragraph of pre-AIA 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. ***Claims 1-15 are rejected under 35 U.S.C. 112(a)*** or 35 U.S.C. 112 (pre-AIA), first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor or a joint

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inventor, or for pre-AIA the inventor(s), at the time the application was filed, had possession of the claimed invention.

With regard to claim 1, the limitations "*receiving, by one or more computing devices, location information associated with a user...[and] determining, by the one or more computing devices, whether the received location information is indicative of a changing location of the user...*" are not adequately disclosed because it is not clear how one can determine a change in location from the receipt of location information. Several location or position fixes are required to determine a change in location. Accordingly, the specification does not inform those skilled in the art about the scope of these limitations with any degree of certainty.

With regard to claims 3 and 5, the limitation "*the second beacon data does not correspond to a change in beacon data from the first beacon data when the number of beacon devices included in the second set of beacon devices but not included in the first set of beacon devices is below a threshold number*" is also not adequately described because no threshold value is provided in the specification.

5. The following is a quotation of 35 U.S.C. 112(b):
(b) CONCLUSION.—The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention.

The following is a quotation of 35 U.S.C. 112 (pre-AIA), second paragraph:
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. **Claims 1-15 are rejected under 35 U.S.C. 112(b)** or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly

claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention.

With regard to claim 1, the metes and bounds of the limitations “the limitations *“receiving, by one or more computing devices, location information associated with a user...[and] determining, by the one or more computing devices, whether the received location information is indicative of a changing location of the user...”* cannot be ascertained in light of the specification since, as noted above, the specification does not adequately describe how one can determine a change in location from the receipt of location information. Again, several location or position fixes are typically required to determine a change in location.” See MPEP 2173.02; 2173.03.

With regard to claim 5, the phrase “that broadcast included in the second set of beacon devices...” is confusing because of the non-standard English employed to express it.

With regard to claim 7, the phrase “...providing, by the one or more computing devices, for display one or more notification comprises...” is confusing because of the non-standard English employed to express it.

With regard to claims 9-10, the term “the determined context” appears to lack antecedent basis in the claims.

With regard to claim 14, the term “the one or more speeds” appears to lack antecedent basis in the claims.

With regard to claim 15, the phrase “at least one of one or more expected speeds” is confusing because the number of expected speeds is unclear, and because

the word "expected" connotes human thought or intelligence. (Perhaps "predetermined speeds" or "scheduled speeds" better recite the claimed subject matter).

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 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 –

(a)(1) the claimed invention was patented, described in a printed publication, or in public use, on sale or otherwise available to the public before the effective filing date of the claimed invention.

8. ***Claims 1, 2, 8 and 10-12 are rejected under 35 U.S.C. 102(a)(1)*** as being anticipated by 2010/0317371 (Westerinen).

With regard to claim 1, as best understood, Westerinen discloses *a computer-implemented method of determining user context* (See, e.g. Westerinen at FIGs. 7 – 13, wherein various computer implemented methods are disclosed), *the method comprising:*

Westerinen discloses *receiving, by one or more computing devices, location information associated with a user* (See, e.g. Westerinen at FIGs. 2-5 and 16, and at [0123-129], wherein one of more computers for implementing the methods of the invention are disclosed, and see, e.g., FIG. 2a and 2b, and at [0038-40], wherein the user device computer obtains location information via GPS or wireless networks);

Westerinen discloses *detecting, by the one or more computing devices, first beacon data broadcast by a first set of beacon devices* (See, e.g. Westerinen at FIG. 7 and [0090-91], wherein first beacon location data can be obtained from beacon signals (e.g., RF beacon, Wi-Fi, wireless LAN, IRDA, etc.) that are emitted from a first particular

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location (e.g., an office building, a warehouse, retail establishment, etc.) that the user device visits; and see Westerinen at FIGs. 15a and [111-120], wherein an example sequence of events is provided to show how beacon data is detected sequentially, in one location (e.g., at home or at a coffee shop), the first beacon data is detected from the beacons at these locations (see again [0090-91], which teaches that a location can have a set of associated beacons));

Westerinen discloses [that] *subsequent to detecting the first beacon data, detecting, by the one or more computing devices, second beacon data broadcast by a second set of beacon devices* (See, e.g. Westerinen at FIG. 7 and [0090-91], wherein subsequent second beacon location data can be obtained from beacon signals (e.g., RF beacon, Wi-Fi, wireless LAN, IRDA, etc.) that are emitted from a second particular location (e.g., an office building, a warehouse, retail establishment, etc.) that the user device subsequently visits; and see Westerinen at FIGs. 15a and [111-120], wherein an example sequence of events is provided to show how beacon data is detected sequentially, in another location (e.g., at work), second beacon data is detected from the beacons at this location (see again [0090-91], which teaches that a location can have a set of associated beacons));

Westerinen discloses *determining, by the one or more computing devices, whether the received location information is indicative of a changing location of the user* (See, e.g. Westerinen at FIGs. 6, 7, 11, 12 and 15a, and at [0079, 90-91, 97, 111-120], wherein a change in location is tracked (e.g., at [0079]) and determined);

Westerinen discloses *determining, by the one or more computing devices, whether the second beacon data corresponds to a change in beacon data from the first beacon data* (See, e.g. Westerinen at FIG. 7 and 15a, and at [0091-92, 111-120], wherein the beacon data is analyzed to determine if the second beacon data represents a change in beacon data);

Westerinen discloses *determining, by the one or more computing devices, a context associated with the user based at least in part on whether the received location information corresponds to a changing location of the user and based at least in part on whether the second beacon data corresponds to a change in beacon data from the first beacon data* (See, e.g. Westerinen at FIGs. 1, 4, 6-13 and at [0036, 61,67], wherein various methods for determining the context based on user device location or beacon changes are disclosed; at [0036], for example, "the presence of an EM signal...can be used to gain important clues about the current context of the mobile device"); and

Westerinen discloses *providing for display, by the one or more computing devices, one or more notifications associated with the determined context* (See, e.g. Westerinen at FIGs. 14 and [0107-110], wherein various contextual notifications are shown and described, e.g., the device can recognize the "home" context, or some other setting).

With regard to claim 2, as best understood, Westerinen discloses [that] *determining whether the second beacon data corresponds to a change in beacon data from the first beacon data further comprises identifying, by the one or more computing devices, a number of beacon devices included in the second set of beacon devices but*

not included in the first set of beacon devices (See, e.g. Westerinen at FIG. 15a, wherein a second set of beacons includes a second beacon (Wi-Fi (ID4)) which is associated with a coffee shop, the second beacon (a set of one) is not included in the first set of beacons associated with home (GSM ID1 and Wi-Fi (ID2)).

With regard to claim 8, as best understood, Westerinen discloses [that] *responsive to determining the context, adjusting, by the one or more computing devices, a scan rate of scanning for beacon devices* (See, e.g. Westerinen at FIG. 11, wherein at steps 1112 and 1115, the “sensing interval,” i.e., the scan rate is adjusted based on the context).

With regard to claims 10-11, as best understood, Westerinen discloses *receiving, by the one or more computing devices, an input from a user indicative of a current activity associated with the user; and associating, by the one or more computing device, the user activity with the first beacon data and the second beacon data and* (claim 10) *the determined context with the one or more performed actions* (See, e.g. Westerinen at FIGs. 13-14a-d and [0104-5], wherein the user is prompted to associate (label) user activity with a first beacon (e.g., home at FIG. 14b) or associate a location (at, e.g., FIG. 14a) with an activity and location (e.g., [0104-5] “coffee” or “Starbucks at 2nd Ave”)).

With regard to claim 12, as best understood, Westerinen discloses [that] *determining the context associated with the user further comprises identifying, by the one or more computing devices, a previously determined context associated with at least one of the location information, the first beacon data, and second beacon data*

(See, e.g. Westerinen at FIGs. 13-14b, wherein the system associates the user's "home" or "work" (previously determined contexts) with the location or beacon data).

Claim Rejections - 35 USC § 103

9. 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.

10. The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103 are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. This application currently names joint inventors. In considering patentability of the claims the examiner presumes that the subject matter of the various claims was

commonly owned as of the effective filing date of the claimed invention(s) absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and effective filing dates of each claim that was not commonly owned as of the effective filing date of the later invention in order for the examiner to consider the applicability of 35 U.S.C. 102(b)(2)(C) for any potential 35 U.S.C. 102(a)(2) prior art against the later invention.

13. ***Claims 3-7, 9 and 13-15 are rejected under 35 U.S.C. 103*** as being unpatentable over Westerinen in view of US2016/0065722 (Rose).

With regard to claims 3-5, as best understood, Westerinen discloses all of the limitations of the base claims, but does not disclose the newly recited claimed subject matter; however Rose teaches *that the second beacon data does not correspond to a change in beacon data from the first beacon data when the number of beacon devices included in the second set of beacon devices but not included in the first set of beacon devices is below a threshold number* (See, e.g., Rose at [0029, 41], wherein the subsequently detected second beacons are associated with the first set of beacons (i.e., in a private vehicle) when the detected number is below a threshold (i.e., four) or associated with a second set of beacons (i.e., in a public transport facility (see claim 4)) when the detected number is above the threshold so that the user device is configured to detect changes in beacon sets/data (claim 5)).

It would have been obvious to a person having ordinary skill in the art at the time of the effective filing date to provide the teachings of Rose to the methods of Westerinen for the purpose of providing a device that analyzes accelerometer, location

and beacon data to determine and provide contextual data associated with public transportation. See Rose at [0022, 28, 31].

With regard to claims 6 and 7, as best understood, Westerinen discloses all of the limitations of the base claims, but does not disclose the claimed subject matter; however Rose teaches *determining the context associated with the user comprises determining, by the one or more computing devices, that the user is located in an urban setting* (See, e.g., Rose at [0034-35], wherein beacon messages indicate that one is near a Chicago Transit Authority (urban) station or wherein maps are provided to provide location data), and (claim 7) *providing, by the one or more computing devices, for display at least a first notification that indicates at least one of a route or a time schedule associated with the public transit vehicle* (See, e.g., Rose at [0035], wherein, e.g., bus route data, station data, etc. is provided).

It would have been obvious to a person having ordinary skill in the art at the time of the effective filing date to provide the teachings of Rose to the methods of Westerinen for the purpose of providing a device that analyzes accelerometer, location and beacon data to determine and provide contextual data associated with public transportation. See Rose at [0022, 28, 31].

With regard to claim 9, as best understood, Westerinen discloses *associating, by the one or more computing devices, the determined context with at least one of the location information, the first beacon data, and the second beacon data* (See, e.g., Westerinen at FIG. 15a, wherein the context (e.g., coffee shop) is associated with both a beacon and the location data (via GPS or wireless means as noted above)).

With regard to claims 13 - 15, as best understood, Westerinen discloses all of the limitations of the base claims, but does not disclose the claimed subject matter; however Rose teaches *determining, by the one or more computing devices, one or more speeds at which the user travels over a period of time in which the location data is received and the first and the second beacon device is detected; wherein determining, by the one or more computing devices, the context associated with the user comprises determining, by the one or more computing devices, the context associated with the user based at least in part on the determined one or more speeds* (See, e.g., Rose at [0029, 37, 38 and 44], wherein the electronic device determines that the context is vehicular travel based on an analysis of location, beacon data, velocity and/or acceleration data), and (at claim 14) that *the one or more speeds match a profile associated with vehicular travel; wherein determining, by the one or more computing devices, the context associated with the user comprises determining, by the one or more computing devices, the context associated with the user based at least in part on the determined profile* (See, e.g., Rose at [0037, 38 and 44], wherein the electronic device compares location, acceleration and velocity data to a *vehicular signature* (i.e., a profile) to determine the context (vehicular transport)), and (at claim 15) that *the profile comprises at least one of one or more expected speeds associated with vehicular travel over one or more time periods, or the location of one or more stops relative to a route of vehicular travel* (See, e.g., Rose at [0037, 38 and 44], wherein the electronic device compares location, acceleration and velocity data to a vehicular signature (i.e., a profile) to determine the context (vehicular transport), and note if the vehicular signature is

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compared to these measurements for context, it must include expected values for that comparison).

It would have been obvious to a person having ordinary skill in the art at the time of the effective filing date to provide the teachings of Rose to the methods of Westerinen for the purpose of providing a device that analyzes accelerometer, location and beacon data to determine and provide contextual data associated with public transportation. See Rose at [0022, 28, 31].

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See: 2011/0306357 (Alizadeh-Shabdiz), which is directed to determining beacon transmission characteristics; US 9,204,251 (Mendelson) which is directed to contextual navigation services using Bluetooth; US 2014/0171039 (Bjontegard), which is directed to contextually intelligent communications systems; US 9,037,125 (Kadous), which is directed to wearable contextual devices; US 2016/0302036 (Chan), which is directed to providing contextual messaging based on beacon data; US 2012/0323687 (Schuster) which is directed to mobile messaging and data tracking.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL P. MALLEY SR. whose telephone number is (571)272-4663. The examiner can normally be reached on M-Th. (1st); M-F (2nd) 7:30-5:00.

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, Tashiana R. Adams can be reached on (571)270-5228. 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 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.

/DANIEL P. MALLEY SR./
Examiner, Art Unit 3648

/GREGORY C. ISSING/

Primary Examiner, Art Unit 3646

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Notice of References Cited	Application/Control No. 14/802,016		Applicant(s)/Patent Under Reexamination BHADRICHA ET AL.	
	Examiner DANIEL P. MALLEY SR.		Art Unit 3648	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-2011/0306357 A1	12-2011	ALIZADEH-SHABDIZ; Farshid	G01S5/0278	455/456.1
*	B	US-9,204,251 B1	12-2015	Mendelson; Ehud	G08G1/14	1/1
*	C	US-2014/0171039 A1	06-2014	Bjontegard; Bernt Erik	H04L29/06034	455/414.1
*	D	US-9,037,125 B1	05-2015	Kadous; Mohammed Waleed	H04M1/72577	455/418
*	E	US-2016/0302036 A1	10-2016	Chan; Victor D.	H04W4/023	1/1
*	F	US-2012/0323687 A1	12-2012	Schuster; Adam	G06Q30/02	705/14.57
*	G	US-2010/0317371 A1	12-2010	Westerinen; William J.	H04M1/72566	455/456.6
*	H	US-2016/0065722 A1	03-2016	Rose; Mark A.	H04M1/72569	370/338
	I	US-				
	J	US-				
	K	US-				
	L	US-				
	M	US-				

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N					
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	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
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	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.