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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/491,140	09/19/2014	Robert Giometti	5000-0160 (2013-13)	6984
107849 SkyCross Dock	7590 01/22/201 et	6	EXAM	INER
Guntin & Gust, PLC 117 S. Cook St.			JEN, MINGJEN	
No. 358			ART UNIT	PAPER NUMBER
Barrington, IL (	50010		3664	
			NOTIFICATION DATE	DELIVERY MODE
			01/22/2016	ELECTRONIC

# 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):

docketing@ggip.com

	Application No. 14/491,140	Applicant(s) GIOMETTI ET AL.					
Office Action Summary	Examiner IAN JEN	Art Unit 3664	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 THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period v  - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	Ga(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed the mailing date of D (35 U.S.C. § 133	f this communication.				
Status							
1) Responsive to communication(s) filed on 12/12  A declaration(s)/affidavit(s) under 37 CFR 1.1							
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This	action is non-final.						
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.  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 <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims*							
5) Claim(s) 1-20 is/are pending in the application. 5a) Of the above claim(s) 17-20 is/are withdraw 6) Claim(s) is/are allowed. 7) Claim(s) 1-17 is/are rejected. 8) Claim(s) are objected to. 9) Claim(s) are subject to restriction and/o and claims have been determined allowable, you may be elemanticipating intellectual property office for the corresponding and the interior of the interi	vn from consideration.  r election requirement. igible to benefit from the <b>Patent Pro</b> epplication. For more information, plea	ase see	ı <b>way</b> program at a				
Application Papers  10) ☐ The specification is objected to by the Examine  11) ☑ The drawing(s) filed on 09/19/2014 is/are: a) ☑  Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct	I accepted or b)  objected to by drawing(s) be held in abeyance. See	e 37 CFR 1.85	(a).				
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)	_						
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SPaper No/s)/Mail Date 09/19/2014/06/24/2015:12/14/2015</li> </ol>	3)						

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## **DETAILED ACTION**

#### Response to Amendment

1. Applicant's election without traverse of Group I in the reply filed on December 14th, 2015 is acknowledged.

- 2. Claims 1 16 are currently elected.
- 3. Claims 17 20 are currently withdrawn
- 4. The information disclosure statement (IDS) submitted is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

# **Drawings**

5. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the a first set of coordinates, an alternate location must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must

be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

# Claim Rejections - 35 USC § 112

- 6. 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.
- 7. Claims 1 and 4 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.

As for claim 1, lines 5, the phrase "improved quality of communication", does not distinctly point out what and which degree of the quality regarding the communication is improved as shall be distinctly set forth regards applicant's invention definitely in claim

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limitation. In this instant case, applicant recited phrase regarding "improved quality" directs to a subjectively determined term in relative terminology. Further clarification is required.

As for claim 4, lines 4, the phrase "improved communications", does not distinctly point out what and which degree of communication is improved as shall be distinctly set forth regards applicant's invention definitely in claim limitation. In this instant case, applicant recited phrase regarding "improved quality" directs to a subjectively determined term in relative terminology. Further clarification is required.

### Claim Rejections - 35 USC § 102

- (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.
- 5. Claims 1 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Smith et al (US Pat Pub No. 2008/0091350).

As for claims 1 and 11, Smith et al shows a method comprising: detecting a location of a communication device by a base station comprising a processor (See at least Para 0047, 0050 and 0126 for TRINAV system including TPS RF receiver 202 on at least para 0063 implementing microprocessor detecting communication device location using adaptive GPS receiver 203 also shown on figure 2 on Para 0054); determining from the location of the communication device a first set of coordinates corresponding to an alternate location by the base station (See at least Para 0078 - 0089 for TPS receiver determining transmitter location as first set of coordinate alternatively with respect to transmitter location), an improved quality of

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communications is provided to the communication device at the alternate location ( See at least Para 0091 for reconverted Longitude, Latitude, Height, LLH format coordinate, Para 0056 provided to TSP user; See also Para 0049 for TPS assess signal quality and unit health for employed within receiver to validate GPS position for spoofing error in the GPS fix ); transmitting the first set of coordinates to the communication device by the base station (See at least Para 0091 for reconverted Longitude, Latitude, Height, LLH format coordinate, Para 0056 provided to TSP user, Para 0067, by TRINAV system including TPS RF receiver 202 on at least Para 0047,0050 and 0126 ).

As for claim 2, Smith et al shows the communication device presents navigation information comprising instructions for navigating from the location of the communication device to the alternate location ( See at least Para 0215 for navigation aid for providing direction heading orientation ).

As for claim 3, Smith et al shows the navigation information comprises a geographical feature at the alternate location (See at least Para 0091 for reconverted Longitude, Latitude, Height, LLH format coordinate, Para 0056).

As for claim 4, Smith et al shows the determining is performed based on communications quality data associated with a plurality of locations in a service area of the base station (See at least Para 0067 for group of transmitter on the surface of earth), the communications quality data being stored in a storage device coupled to the base station (See at least Para 0054 for signal

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assessment for QoS monitoring), and improved communications between the communication device and the base station are provided at the alternate location (See at least Para 0093 for TSP positioning precision from 0.35 down 0.09).

As for claim 5, Smith et al shows the detecting further comprises detecting a communications quality indication relating to the location of the communication device (See at least Para 0054 for signal assessment for QoS monitoring; See also Para 0093 for TSP positioning precision from 0.35 down 0.09), and further comprising adding the location of the communication device and the communications quality indication to the communications quality data (See at least Para 0054 for signal assessment for QoS monitoring also on Para 0067 for group of transmitter on the surface of earth ).

As for claim 6, Smith et al shows the communications quality data further includes communications quality data associated with a second plurality of locations in a second service area of a second base station (See at least Para 0054 for signal assessment for QoS monitoring also on Para 0067 for group of transmitter on the surface of earth ).

As for claim 7, Smith et al shows the first set of coordinates corresponds to a location in the second service area (See at least Para 0078 - 0089 for TPS receiver determining transmitter location as first set of coordinate alternatively with respect to transmitter location).

As for claims 8 and 16, Smith et al shows transmitting to the communication device a second set of coordinates corresponding to a location of the base station, the communication device (See at least Para 0078 - 0089 for TPS receiver determining transmitter location as first set of coordinate alternatively with respect to transmitter location), responsive to receiving the second set of coordinates (See at least Para 0078 - 0089 for TPS receiver determining transmitter location as first set of coordinate alternatively with respect to transmitter location), adjusts an antenna mode of the communication device from omnidirectional mode to beamforming mode (See at least Para 0066 for transmitter array).

As for claim 9, Smith et al shows the communication device presents direction information comprising an instruction for directing the communication device relative to the base station (See at least Para 0215 for navigation aid for providing direction heading orientation).

As for claim 10, Smith et al shows the communication device presents orientation information comprising an instruction for orienting the communication device (See at least Para 0215 for navigation aid for providing direction heading orientation).

As for claim 12, Smith et al shows the determining is performed based on communications quality data associated with a plurality of locations in a service area of the base station, and wherein the alternate location is in the service area of the base station (See at least Para 0054 for signal assessment for QoS monitoring; See also Para 0093 for TSP positioning precision from 0.35 down to 0.09).

As for claim 13, Smith et al shows the base station is a first base station having a first service area (See at least figure 3 for multiple service area), the determining is performed based on communications quality data associated with a plurality of locations in the first service area (See at least Para 0054 for signal assessment for QoS monitoring; See also Para 0093 for TSP positioning precision from 0.35 down 0.09) and in a second service area of a second base station remote from the first base station, and wherein the alternate location is in the second service area (See at least Para 0054 for signal assessment for QoS monitoring; See also Para 0093 for TSP positioning precision from 0.35 down 0.09).

As for claim 14, Smith et al shows the communication device presents navigation information comprising instructions for navigating from the location of the communication device to the alternate location (See at least Para 0215 for navigation aid for providing direction heading orientation).

As for claim 15, Smith et al shows the navigation information comprises a landmark corresponding to the alternate location (See at least Para 0066 for transmitter array).

# Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to IAN JEN whose telephone number is (571)270-3274. The examiner can normally be reached on Monday - Friday 9:00-6:00 (EST).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Koi Tran can be reached on 571-272-6919. 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.

/Ian Jen/ Primary Examiner, Art Unit 3664