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Drive, Seattle, WA 98122 (US). **OLSON, Tracey** [US/US];
1001 Hildebrand Lane Northeast, Bainbridge Island, WA
98110 (US).

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(72) Inventors; and

(75) Inventors/Applicants (for US only): **PRESTON, Dan, A.**
[US/US]; 11621 Meadowmeer Circle, Bainbridge Island,
WA 98110 (US). **PRESTON, Joe** [US/US]; 12661 Sunrise
Drive Northeast, Bainbridge Island, WA 98110 (US).

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(71) Applicant (for all designated States except US): **AIRBIQ-
UITY INC.** [US/US]; 945 Hildebrand Lane, Northeast,
Bainbridge Island, WA 98100 (US).

(74) Agent: **FERRIS, Kassim, M.**; 900 SW Fifth Avenue,
Suite 2600, Portland, OR 97204-1268 (US).

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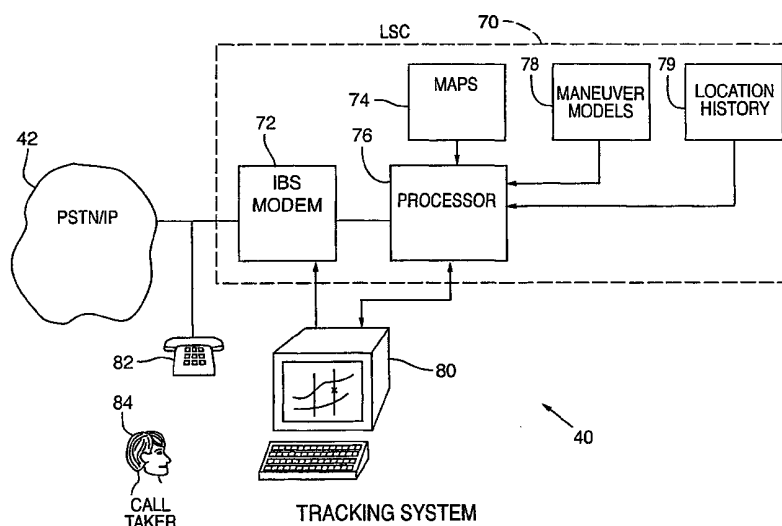
(71) Applicants and

(72) Inventors: **LUTTER, Pierce** [US/US]; 1446 Madrona

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(54) Title: CLOSED LOOP TRACKING SYSTEM



(57) Abstract: A closed loop tracking system accurately tracks targets by polling a mobile unit for positional data on a real-time and historical basis. The polled data is filtered and corrected before generating track candidates. The tracking system chooses the best candidate for displaying on a map. When the tracking system needs additional information to make the best candidate choice, the mobile unit is polled for the data necessary to make the correct choice, making the tracking system closed loop. The tracking system transmits digital positional data over the same voice channel that was established for voice communications with a tracking system call taker. This prevents the mobile unit from having to establish a second separate wireless data communication connection with the tracking system. Maps are used to identify the location of the tracked mobile unit. Better positional accuracy in latitude and longitude is provided by using measurement corrections from a variety of different sources in addition to the Global Positioning System and triangulation data.



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IPC 7 G08G1/127

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category ° | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|--|-----------------------|
| X | WO 98 12862 A (ATX RESEARCH) 26 March 1998 (1998-03-26) page 4, line 25 -page 5, line 6 --- | 1 |
| A | WO 96 30884 A (PEDERSEN WILLY PALLE) 3 October 1996 (1996-10-03) the whole document --- | 1-15 |
| A | US 5 922 040 A (PRABHAKARAN SANJIV) 13 July 1999 (1999-07-13) ----- | |

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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G document member of the same patent family

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Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Créchet, P

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Information on patent family members

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| Patent document cited in search report | Publication date | Patent family member(s) | Publication date |
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