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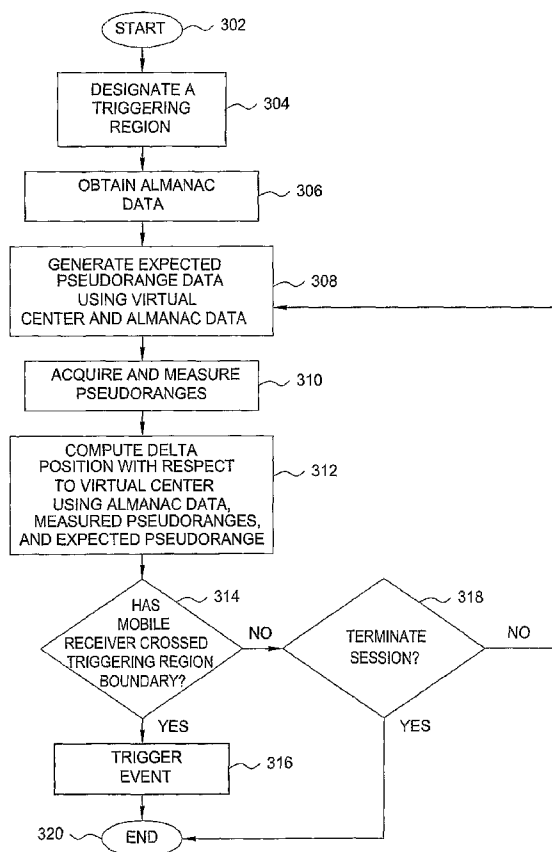
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[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR LOCATION-BASED TRIGGERING IN AN ASSISTED SATELLITE POSITIONING SYSTEM



(57) Abstract: Method and apparatus for location-based triggering in a mobile receiver is described. In one example, a triggering region is designated. Expected pseudorange data is generated within the mobile receiver and pseudoranges to a plurality of satellites are measured. A delta position is computed with respect to a virtual center of the triggering region using satellite trajectory data, the measured pseudoranges, and the expected pseudoranges. The delta position is compared with the radius restriction value, the results of which may be used to trigger an event. In another example, expected pseudorange data is obtained at the mobile receiver. Pseudoranges from the mobile receiver to a plurality of satellites are measured. The measured pseudoranges and expected pseudoranges are compared using a metric to produce delta values. The delta values are compared with a radius restriction value, the results of which may be used to trigger an event.

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# INTERNATIONAL SEARCH REPORT

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**A. CLASSIFICATION OF SUBJECT MATTER**  
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 USPC: 342/357.07,357.08,357.09  
 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 practicable, search terms used)  
 EAST see attached sheets

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,550,551A (ALESIO) 27 August 1996, (27.08.1996), see entire document, Figs. 2 and 3	1, 3, 4, 7, 23, 24 and 26
X	US 6,327,471B1 (SONG) 04 December 2001, (04.12.2002), see entire document	1-7, 10-12 and 23-27
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Y		8, 9, 13-22, and 28-34
Y	US 6,411,892B1 (VAN DIGGELEN) 25 June 2002 (25.06.2002), see Figs 5 and 8,	1-34
Y	US 6,453,237B1 (FUCHS et al) 17 September 2002, (17.09.2002), see for example, Figs 2A, 3 and 9.	1-34
Y	US 2003/0052817A1 (DIGGELEN) 20 March 2003 (20.03, 2003), see Figs 3 and 4 and par. [0074]-[0080].	1-34
Y	US 6,556,819B2 (IRVIN) 29 April 2003 (29.04.2003), see entire document.	1-34

Further documents are listed in the continuation of Box C.       See patent family annex.

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