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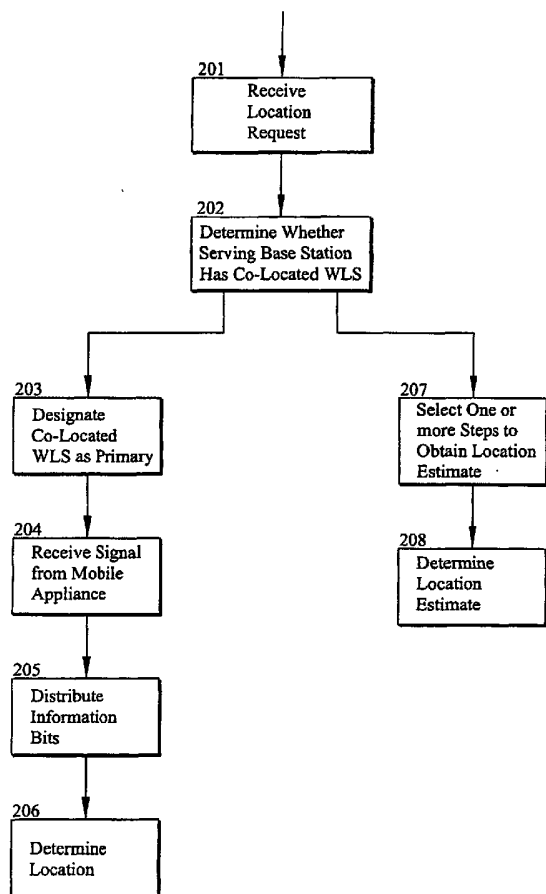
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(54) Title: METHOD FOR SPARSE NETWORK DEPLOYMENT ACCURACY ENHANCEMENTS



(57) Abstract: A method for use in a wireless communication system with a network overlay geolocation system having a sparse deployment network in which base stations of the wireless communication system may or may not have a co-located wireless location sensors (WLS) (202). The method enables detection and measurement of a target mobile's signal (204) independently from a primary WLS located at the base station serving the target mobile (203), which enable location estimated in previous "no location" areas. The method selects based on predetermined criteria from one or more of several techniques that aid in the detection and determining a location for the target mobile (207). The method selects from timing advance, power levels, pattern matching, EOTD, speed, and pseudo range measurements to estimate the location of the mobile (208). The method also uses ambiguity function processing to detect the signal and measure an attribute of the signal.

WO 2005/002124 A3



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : H04Q 7/20  
 US CL : 455/456.1

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)  
 U.S. : 455/456.1, 456.2, 456.5, 456.6, 561

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)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5,600,706 A (DUNN et al.) 04 February 1997 (04.02.1997); abstract, fig. 2	1-23
X	US 5,973,643 A (HAWKES et al.) 26 October 1999 (26.10.1999); fig. 1, abstract, col. 5: lines 18-25	1, 4
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A		2-3, 5-23

Further documents are listed in the continuation of Box C.

See patent family annex.

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"A" document defining the general state of the art which is not considered to be of particular relevance	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier application or patent published on or after the international filing date	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
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"O" document referring to an oral disclosure, use, exhibition or other means		
"P" document published prior to the international filing date but later than the priority date claimed		

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