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(54) Title: ESTIMATION OF POSITION USING WLAN ACCESS RADIO PROPAGATION CHARACTERISTICS IN A WLAN POSITIONING SYSTEM

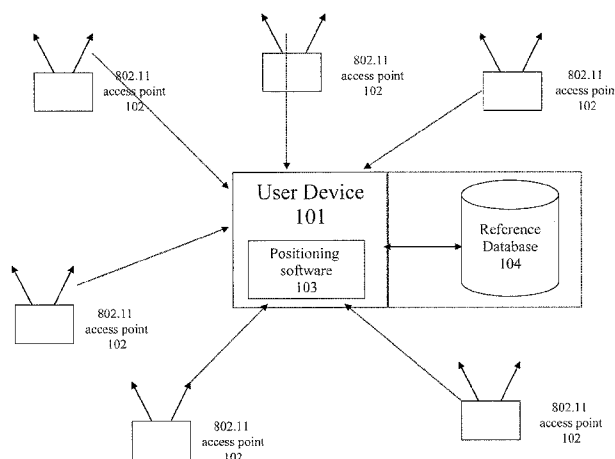


Figure 1

(57) Abstract: A method for estimating position using WLAN access point radio propagation characteristics in a WLAN location based service is provided. A location-based services system has a plurality of Wi-Fi access points in a target area. The Wi-Fi access points are positioned at geographic locations and have signal coverage areas. A method of characterizing at least one of the Wi-Fi access points comprises determining the geographic location of the Wi-Fi access point, dividing the signal coverage area of the Wi-Fi access point into at least one section, and determining radio propagation characteristics for each section. The radio propagation characteristics of each section characterize a radio channel of the Wi-Fi access point, and the characterization can be used in a location algorithm.

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IPC: H04Q 7/00(2006.01);H04Q 7/24(2006.01)

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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. : 370/329

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.
T	US 2006/0072502 A1 (CRANDALL et al.) 06 April 2006 (06.03.2006) see entire document	1-16
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T	US 2005/0073980 A1 (THOMSON et al.) 07 April 2005 (07.04.2005) see entire document	1-16

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