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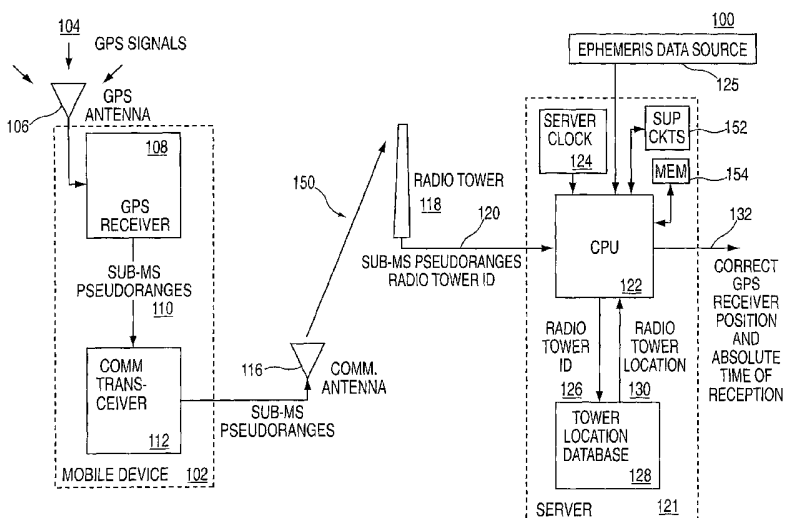
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(54) Title: APPARATUS FOR PROCESSING OF GPS SIGNALS



(57) Abstract: A method and apparatus for computing GPS receiver (108) position without using absolute time information transmitted by the satellite or by an alternative source of timing available at the GPS receiver. The GPS receiver is contained in an integrated receiver that also includes a wireless communication transceiver (112), but does not have access to an accurate source of absolute time information. The wireless transceiver communicates through a wireless network (150) to a server (121). The GPS receiver measures satellite pseudoranges and uses the wireless communication transceiver to send the pseudoranges to the server. The server fits the pseudoranges to a mathematical model on which the GPS receiver position and the absolute time are unknown parameters. The server then computes a position and absolute time that best fit the model, thus yielding the correct position for the GPS receiver, and the absolute time at which the pseudorange measurements were made.

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US01/47053

A. CLASSIFICATION OF SUBJECT MATTER
 IPC(7) : G01S 5/02; H04B 7/185
 US CL : 342/357.1, 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)
 U.S. : 342/357.1, 357.09

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	6,028,537 A (SUMAN E TAL) 22 FEBRUARY 2000 (22/02/00) NOTE GPS RECEIVER (38), TRANSCEIVER (70), AND SERVER (COLUMN 6).	1-35

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

Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
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Continuation of Item 4 of the first sheet:

The title is more than 7 words long.

APPARATUS FOR PROCESSING OF GPS SIGNALS