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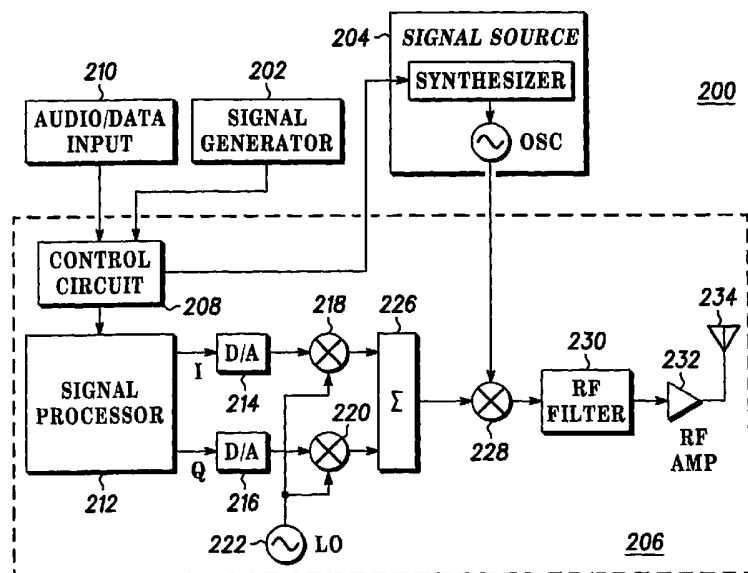
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(54) Title: METHOD AND WIRELESS DEVICE EMPLOYING A PREAMBLE TO INITIATE COMMUNICATIONS



(57) Abstract: A wireless receiver 300 and corresponding method to detect a message identifier or preamble that has been generated and provided by a transmitter 200 uses FFTs to estimate frequency and time offset. The wireless receiver 300 scans, asynchronously and sequentially during a wakeup time, a plurality of predetermined frequencies for the message identifier or specialized preamble. A plurality of received sample sequences are collected, one received sample sequence collected at each of the plurality of predetermined frequencies. A correlation between data corresponding to the preamble and data corresponding to a received sample sequence is compared to a threshold value to determine when the preamble has been detected. The wireless receiver 300 is wakened from a low power mode when the preamble is detected.

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

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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. : 375/343, 344, 295, 132, 133, 138, 219, 222, 220; 455/343.3; 370/280, 281, 294, 321, 347, 337, 503, 509, 510		
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) Please See Continuation Sheet		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X,P --- Y,P	US 2004/0001532 A1 (MASON, JU. et al.) 01 January 2004, abstract and pg. 3, paras. 0032, 0036; pg. 1 and 2 paras. 0010-0013.	1-4, 9, 12, 13, 17-19 ----- 5-8, 10, 11, 14-16, 20-25
Y,E	US 2004/0142696 A1 (SAUNDERS et al.) 22 July 2004, pg. 2 element 128 and 128; pg. 4, para. 0032 and pg. 9, para. 0107-0108.	5-8, 10, 11, 14-16, 20-25
A,P	US 6,671,284 B1 (YONGE, III et al) 30 December 2003, see entire document.	1-25
A	US 5,311,516 A (KUZNICKI et al.) 10 May 1994, see entire document.	1-25
A	US 5,241,568 A (FERNANDEZ et al.) 30 August 1993, see entire document.	1-25
A	US 5,381,133 A (ERHART et al.) 10 January 1995, see entire document.	1-25
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Continuation of B. FIELDS SEARCHED Item 3:
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