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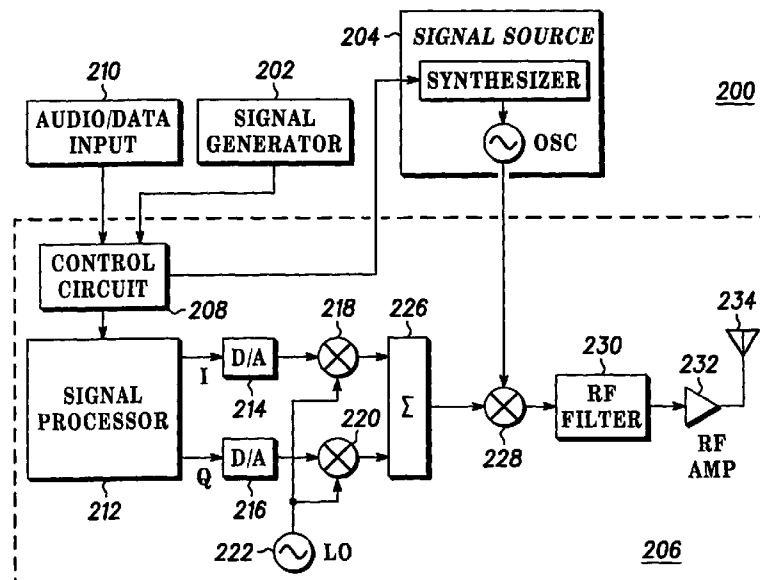
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(54) Title: METHOD AND WIRELESS DEVICE EMPLOYING A PREAMBLE TO INITIATE COMMUNICATIONS



(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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