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METHOD AND WIRELESS DEVICE EMPLOYING A PREAMBLE TO INITIATE COMMUNICATIONS

ABSTRACT

5 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.
10 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
15 from a low power mode when the preamble is detected.



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