

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.

