

Title (en)

DIFFERENTIAL DETECTION UNIT FOR THE ZIGBEE IEEE 802.15.4 STANDARD

Title (de)

DIFFERENTIELLE DETEKTIONSEINHEIT FÜR DEN ZIGBEE IEEE 802.15.4 STANDARD

Title (fr)

UNITE DE DETECTION DIFFERENTIELLE DESTINA AU STANDARD ZIGBEE IEEE 802.15.4

Publication

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Application

EP 06754003 A 20060531

Priority

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Abstract (en)

[origin: WO2006131244A1] The invention relates to a method for detecting data symbols contained in a received radio signal, a PN sequence that is specific for a symbol value being assigned to each data symbol from PN chips succeeding each other at the chip clock pulse at the transmission end, and the PN sequences assigned to the data symbols being offset QPSK modulated. According to the inventive incoherent detection method, the received radio signal is converted into a complex baseband signal sampled at the chip clock pulse, a demodulated signal is generated by differentially demodulating the complex baseband signal sampled at the chip clock pulse, derived sequences are provided, correlation results are calculated by correlating the demodulated signal with the derived sequences, and the values of the data symbols are derived, i.e. detected, by evaluating the correlation results, each derived sequence being allocated to a PIM sequence that can be assigned at the transmission end and being composed of derived chips whose values correspond to one respective logical combination of respective PN chips of the PN sequence which can be assigned at the transmission end and to which the derived sequence is allocated. The invention further relates to a corresponding receive unit.

IPC 8 full level

H04L 27/233 (2006.01); **H04B 1/707** (2011.01)

CPC (source: EP US)

H04B 1/707 (2013.01 - EP US)

Citation (search report)

See references of WO 2006131244A1

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EP 0763919 A2 19970319 - MITSUBISHI ELECTRIC CORP [JP]

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DOCDB simple family (application)

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