

Title (en)

METHOD AND APPARATUS FOR DIGITALLY PROCESSING OFDM SIGNALS FOR RADAR APPLICATIONS

Title (de)

VERFAHREN UND VORRICHTUNG ZUR DIGITALEN VERARBEITUNG VON OFDM-SIGNALEN FÜR RADARANWENDUNGEN

Title (fr)

PROCÉDÉ ET DISPOSITIF DE TRAITEMENT NUMÉRIQUE DE SIGNAUX OFDM POUR DES APPLICATIONS RADAR

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Application

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Abstract (en)

[origin: WO2010124673A1] The present invention relates to a method and to an apparatus for digitally processing OFDM signals, which are emitted by a transmitter using modulation symbols as information carriers, at least partially reflected by one or more objects, and received by a receiver. Without prior channel equalization, the modulation symbols are extracted from the OFDM signals that are received, and the extracted modulation symbols are standardized for the particular emitted modulation symbol by way of complex division. The radar evaluation for determining the distance and/or for determining the speed of the objects is then carried out on the basis of the standardized modulation symbols. The method and the apparatus can be used to determine both the distance and the speed of the objects independently from each other. In addition, the method operates very reliably because it is not influenced by the transmitted information.

IPC 8 full level

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