

Title (en)

METHOD FOR PROCESSING RADIO-FREQUENCY SIGNALS RECEIVED ON R ANTENNAS, AND CORRESPONDING RECEPTION METHOD, DECODING METHOD, COMPUTER PROGRAM AND SYSTEM

Title (de)

VERFAHREN ZUR VERARBEITUNG VON AUF R-ANTENNEN EMPFANGENEN HOCHFREQUENZSIGNALEN SOWIE ENTSPRECHENDES EMPFANGSVERFAHREN, DECODIERUNGSVERFAHREN, COMPUTERPROGRAMM UND SYSTEM

Title (fr)

PROCEDE DE TRAITEMENT DE SIGNAUX RADIOFREQUENCE REÇUS SUR R ANTENNES, PROCEDE DE RECEPTION, PROCEDE DE DECODAGE, PROGRAMME D'ORDINATEUR ET SYSTEME CORRESPONDANTS

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Application

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Abstract (en)

[origin: WO2022254161A1] The invention relates to a method for processing radio-frequency signals received on R antennas, wherein $R \geq 2$, comprising the following steps, implemented by a radio unit: obtainment (311 1) of a frequency representation of the radio-frequency signal received on an antenna; de-mapping (312) of the frequency representations; first estimation (313) of the transmission channel of the radio-frequency signals and of a covariance of noise plus interference; projection (314) of a vector of R complex samples onto a vector of L complex samples, referred to as projected samples; transmission of said vector of L projected samples to a baseband processing unit, as well as the following steps implemented by the base band processing unit: reception of the vector of the L projected samples transmitted by the radio unit; de-mapping (320) of the L projected samples; second estimation (321) of the transmission channel of the radio-frequency signals, following projection; equalization (322) of the L projected samples, taking account of the second channel estimation; and processing (323 1) of the equalized symbols.

IPC 8 full level

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