

Title (en)
METHOD FOR ALLOCATING SUBBANDS TO STREAMS OF A MULTICHANNEL LINK IN A MULTICARRIER MODULATION COMMUNICATION SYSTEM

Title (de)
VERFAHREN ZUM VERGEBEN VON SUBBÄNDERN AN STRÖME EINER MEHRKANALIGEN VERBINDUNG IN EINEM MEHRTRÄGERMODULATIONS-KOMMUNIKATIONSSYSTEM

Title (fr)
PROCEDE D'ALLOCATION DE SOUS-BANDES AUX FLUX D'UNE LIAISON MULTICANAL DANS UN SYSTEME DE COMMUNICATION A MODULATION MULTI PORTEUSE

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Abstract (en)
[origin: WO2006100408A1] The invention concerns a method for allocating a plurality of subbands (SB_i) to a plurality of streams (FL_j) of a multichannel link in a multicarrier modulation communication system, each stream (FL_j) being successively defined in a communication frame of said multichannel link by a number M_j of bits to be transmitted and a noise margin G_j. The invention is characterized in that said method includes the following steps: a) associating with each subband (SB_i) a normalized signal to noise ratio (SNR₀)_i on the multichannel link; b) classifying the subbands (SB_i) in a specific sequence of the normalized signal to noise ratios (SNR₀)_i; c) determining by means of a binary allocation algorithm an energy E_i per subband (SB_i); d) allocating for each stream (FL_j) taken in the sequence of said frame, a number N_j of consecutive subbands (SB_i) taken in the sequence of normalized signal to noise ratios, so that the sum of the numbers n_{ij} of bits in each subband (SB_i) allocated to each stream (FL_j), the number of bits n_j being defined by: $n_{ij} = \log_2(1 + E_{i,j} \cdot (SNR_0)^{-1})$, is equal to formula (I). The invention is applicable to multicarrier modulation multichannel links.

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