

Title (en)  
ITERATIVE CALCULATION OF COEFFICIENTS FOR A MULTICARRIER EQUALISER

Title (de)  
ITERATIVE KOEFFIZIENTENRECHUNG FÜR EINEN MEHRTRÄGERENTZERRER

Title (fr)  
EGALISEUR ADAPTATIF DE VOIES OFDM A DECISION RETROACTIVE

Publication  
**EP 1419628 A2 20040519 (EN)**

Application  
**EP 02754028 A 20020813**

Priority  
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Abstract (en)  
[origin: WO03017607A2] An OFDM adaptive channel equalizer is provided having a coefficient adaptation branch that updates a coefficient value based upon a weighted average of a previous coefficient value and an optimal value for the current symbol. An override or nulling of the weighting factor is provided to mitigate the effects of noise on the current symbol. An embodiment of the OFDM adoptive channel equalizer requires only one coefficient memory port and only requires two multipliers as in a non-adaptive equalizer thereby allowing a cost effective hardware implementation. [origin: WO03017607A2] An multicarrier adaptive channel equalizer is provided, which has a coefficient adaptation branch that updates the filter coefficients based upon a weighted average of previous coefficient values and decisions for the current symbol. An override or nulling of the weighting factor is provided to mitigate the effects of noise on the current symbol. An embodiment of the OFDM adaptive channel equalizer requires only one coefficient memory port, and only two multipliers as in a non-adaptive equalizer thereby allowing a cost effective hardware implementation.

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