

Title (en)
MEANS AND METHOD FOR INCREASING PERFORMANCE OF INTERFERENCE-SUPPRESSION BASED RECEIVERS

Title (de)
EINRICHTUNG ZUR STÖRSIGNALUNTERDRÜCKUNG IN EINEM EMPFÄNGER

Title (fr)
MOYENS ET PROCEDE PERMETTANT D'AMELIORER LA PERFORMANCE DES RECEPTEURS A ANTIPARASITAGE

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Abstract (en)
[origin: WO0062415A1] In a bidirectional data channel between a central station and a multiple of remote stations, a method (fig. 6) for equalizing interference over a synchronized packet or frame based baseband transmission system wherein the crosstalk on the system is cyclostationary or periodic with a period equal to a symbol interval, the method (fig. 6) comprising the steps of synchronizing the transmitters and receivers using the uncorrelated transmit signals; generating the cyclostationary NEXT and FEXT interference (fig. 6) along with ISI using the uncorrelated symbols at the synchronized transmitters at one or more remote stations and the centrally station; using cascaded fractionally spaced linear equalizer (FSLE) and decision feedback equalizer (DFE) for both interference suppression and equalization to minimize excess bandwidth at central receivers at the central station; (fig. 6) increasing the receiver's FSLE filter taps (NT) to maximize signal to noise ratio; (fig. 6) combining FSLE/DFE and proper phase sampling adjustment, enabling use of the spectral correlation properties peculiar to the modified signals (fig. 6).

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