Title (en)

ERROR CORRECTABLE DATA TRANSMISSION METHOD AND DEVICE BASED ON SEMI-CYCLIC CODES

Title (de)

ÜBERTRAGUNGSVERFAHREN UND -VORRICHTUNG FÜR FEHLERKORRIGIERBARE DATEN UNTER ANWENDUNG HALBZYKLISCHER CODES

Title (fr)

PROCEDE ET DISPOSITIF DE TRANSMISSION DE DONNEES A CORRECTION D'ERREURS FONDE SUR DES CODES SEMI-CYCLIQUES

Publication

EP 0698269 A1 19960228 (EN)

Application

EP 95907126 A 19950214

Priority

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- EP 94200336 A 19940216
- EP 94200452 A 19940223
- EP 94200703 A 19940321
- EP 94201824 A 19940624
- EP 94203394 A 19941122
- IB 9500100 W 19950214

Abstract (en)

[origin: WO9523384A2] A digital signal is transmitted as a plurality of (s) sequences of information symbols of uniform bit length. Each sequence occurs in a respective input channel, check words being included in the transmission through encoding. A first block of symbols, one from each input channel, is applied in a first arrangement state to a first error correcting encoder to generate a series of (p) first check symbols. Next, each symbol in the first block and each of the (p) first check symbols is delayed by a respective different delay so as to obtain a second block of symbols in a second arranging state for supply to a second error-correcting encoder. This generates a series of (q) second check symbols for transmission. First and second check symbols are generated to satisfy a respective parity check matrix with (s+p+q) columns and (p) and (q) rows respectively, of semi-cyclic codes. The delay puts adjacent symbols of the first arranging state into adjacent instances of the second arranging state and the (q) second check symbols are retro-coupled into the first encoder in accordance with the first arranging state.

IPC 1-7

G11B 20/00

IPC 8 full level

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See references of WO 9523384A2

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