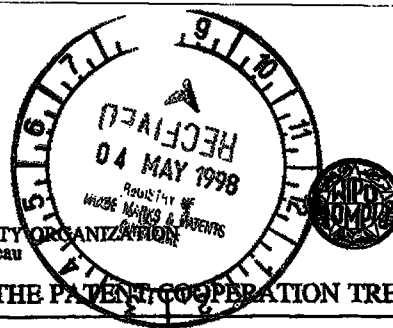


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(54) Title: BIT-INTERLEAVED RATE 16/17 MODULATION CODE WITH THREE-WAY BYTE-INTERLEAVED ECC

(57) Abstract

A modulation method generates a rate 16/17 ($d = 0$, $G = 7/11 = 11$) modulation code for transferring user digital data bytes having a three-way ECC interleave through a data transfer channel in accordance with the steps of: shuffling (112, 114) the user data bytes in order to rearrange an order of the bytes in a predetermined manner and putting out AiBi byte pairs, encoding (116) eight bits of the Ai bytes of the AiBi byte pairs in accordance with a predetermined rate 8/9 modulation code to produce nine code bits a0-a8, and interleaving (130) the nine code bits a0-a8 of each Ai byte with eight unencoded bits of each Bi byte in accordance with a predetermined bitwise interleave pattern to generate the rate 16/17 modulation code. A preferred code and circuitry for the modulation method are also described.

