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(81) 指定国 (除另有指明, 要求每一种可提供的国家保护): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU,

(54) Title: DATA TRANSMISSION METHOD AND APPARATUS, SYSTEM, AND COMPUTER-READABLE STORAGE MEDIUM

(54) 发明名称: 数据传输方法、装置、系统及计算机可读存储介质

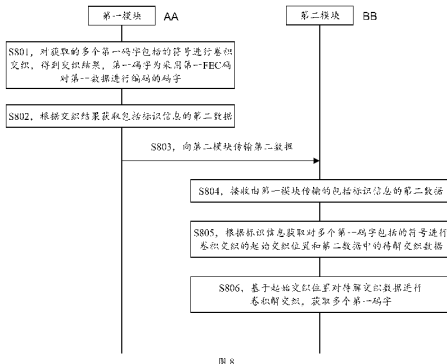


图 8

- S801 Perform convolutional interleaving on symbols contained in a plurality of acquired first codewords, and obtain an interleaving result, the first codewords being codewords utilizing first FEC code to encode first data
- S802 According to the interleaving result, obtain second data comprising identification information
- S803 Transmit the second data to a second module
- S804 Receive second data transmitted by the first module and comprising identification information
- S805 According to the identification information, obtain the initial interleaving position used for the convolutional interleaving of the symbols included in the plurality of first codewords, and obtain data to be deinterleaved contained in the second data
- S806 Based on the initial interleaving position, perform convolutional deinterleaving on the data to be deinterleaved, to obtain a plurality of first codewords
- AA First module
- BB Second module

(57) Abstract: The present application discloses a data transmission method and apparatus, a system, and a computer-readable storage medium, and relates to the technical field of communication. The method comprises: a first module performing convolutional interleaving on symbols contained in a plurality of acquired first codewords, so as to obtain an interleaving result, the first codewords being codewords utilizing first FEC code to encode first data; and according to the interleaving result, obtaining second data comprising identification information, and transmitting the second data to a second module. When convolutional interleaving is performed on the symbols contained in the plurality of first codewords, if a burst error appears in subsequent second data, the burst error will be spread to the plurality of symbols, thereby reducing the post-error-correction BER of the second data. When the second data comprises a second code word, and identification information comprises code word boundary information regarding the second code word, there is no need to additionally insert additional data to act as identification information, thereby reducing data transmission costs.

(57) 摘要: 本申请公开了一种数据传输方法、装置、系统及计算机可读存储介质, 涉及通信技术领域。方法包括: 第一模块对获取的多个第一码字包括的符号进行卷积交织, 得到交织结果, 第一码字为采用第一 FEC 码对第一数据进行编码的码字; 根据交织结果获取包括标识信息的第二数据, 向第二模块传输第二数据。通过对多个第一码字包括的符号进行卷积交织, 后续第二数据中出现突发误码时, 突发误码将被分散到多个符号中, 从而降低第二数据在纠错后的 BER。在第二数据包括第二码字的情况下, 标识信息包括第二码字的码字边界信息, 无需额外插入额外数据作为标识信息, 从而数据传输成本较低。

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- (84) 指定国(除另有指明，要求每一种可提供的地区保护): ARIPO (BW, CV, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, SD, SL, ST, SZ, TZ, UG, ZM, ZW), 欧亚 (AM, AZ, BY, KG, KZ, RU, TJ, TM), 欧洲 (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, ME, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG)。

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