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(54) Title: DATA ENCODING METHOD, DATA DECODING METHOD, AND RELATED APPARATUSES

(54) 发明名称: 一种数据编解码方法及相关装置

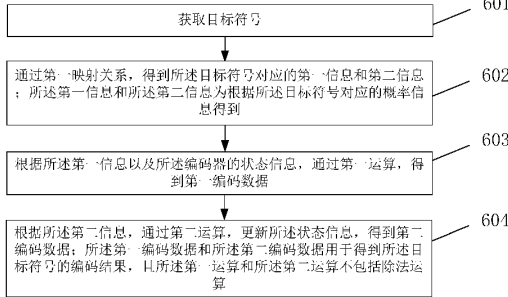


图 6

- 601 Acquire a target symbol  
602 Obtain, by means of a first mapping relationship, first information and second information corresponding to the target symbol, wherein the first information and the second information are obtained according to probability information corresponding to the target symbol  
603 Obtain first encoded data by means of first operation and according to the first information and state information of an encoder  
604 Update the state information by means of second operation and according to the second information, so as to obtain second encoded data, wherein the first encoded data and the second encoded data are used for obtaining an encoding result of the target symbol, and the first operation and the second operation do not comprise division operation

(57) Abstract: A data encoding method and a data decoding method, which are applied to the field of data encoding and decoding. The data encoding method comprises: acquiring a target symbol; obtaining, by means of a first mapping relationship, first information and second information corresponding to the target symbol, wherein the first information and the second information are obtained according to probability information corresponding to the target symbol; obtaining first encoded data by means of first operation and according to the first information and state information of an encoder; and updating the state information by means of second operation and according to the second information, so as to obtain second encoded data, wherein the first encoded data and the second encoded data are used for obtaining an encoding result of the target symbol, and the first operation and the second operation do not comprise division operation. In the present application, index information in a code table only comprises symbols, and mapped objects only comprise first information and second information, such that the memory occupation in the code table is reduced, and operations which require relatively large consumption are avoided, thereby realizing the balance between a memory and a delay.

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(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,  
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CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN,  
TD, TG)。

本国际公布：  
— 包括国际检索报告(条约第21条(3))。

**(57)** 摘要：一种数据编解码方法，应用于数据编解码领域，方法包括：获取目标符号；通过第一映射关系，得到目标符号对应的第一信息和第二信息；第一信息和第二信息为根据目标符号对应的概率信息得到；根据第一信息以及编码器的状态信息，通过第一运算，得到第一编码数据；根据第二信息，通过第二运算，更新状态信息，得到第二编码数据；其中，第一编码数据和第二编码数据用于得到目标符号的编码结果，且第一运算和第二运算不包括除法运算。本申请中，编码表中的索引信息仅包括符号，且映射的对象仅包括第一信息和第二信息，相当于降低了编码表中内存占用，且避免了消耗较大的操作，实现内存与时延的平衡。