

(12) 按照专利合作条约所公布的国际申请

(19) 世界知识产权组织
国际局



(10) 国际公布号
WO 2022/100645 A1

(43) 国际公布日
2022 年 5 月 19 日 (19.05.2022)

(51) 国际专利分类号:
H04N 19/51 (2014.01) *H04N 19/176* (2014.01)
H04N 19/139 (2014.01)

(21) 国际申请号: PCT/CN2021/129987

(22) 国际申请日: 2021 年 11 月 11 日 (11.11.2021)

(25) 申请语言: 中文

(26) 公布语言: 中文

(30) 优先权:
202011264969.1 2020 年 11 月 13 日 (13.11.2020) CN

(71) 申请人: 腾讯科技(深圳)有限公司 (TENCENT TECHNOLOGY (SHENZHEN) COMPANY LIMITED) [CN/CN]; 中国广东省深

圳市南山区高新区科技中一路腾讯大厦 35 层, Guangdong 518057 (CN)。

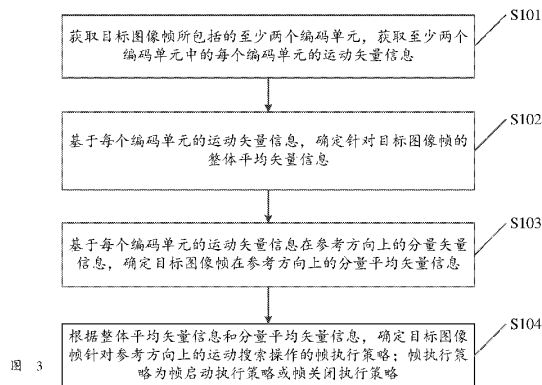
(72) 发明人: 张清 (ZHANG, Qing); 中国广东省深圳市南山区高新区科技中一路腾讯大厦 35 层, Guangdong 518057 (CN)。

(74) 代理人: 北京德琦知识产权代理有限公司 (DEQI INTELLECTUAL PROPERTY LAW CORPORATION); 中国北京市海淀区知春路 1 号学院国际大厦 7 层, Beijing 100083 (CN)。

(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, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, IT, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK,

(54) Title: DATA CODING METHOD AND APPARATUS, AND COMPUTER READABLE STORAGE MEDIUM

(54) 发明名称: 一种数据编码方法、装置以及计算机可读存储介质



S101 OBTAIN AT LEAST TWO CODING UNITS COMPRISED IN A TARGET IMAGE FRAME, AND OBTAIN MOTION VECTOR INFORMATION OF EACH OF THE AT LEAST TWO CODING UNITS
S102 DETERMINE OVERALL AVERAGE VECTOR INFORMATION FOR THE TARGET IMAGE FRAME ON THE BASIS OF THE MOTION VECTOR INFORMATION OF EACH CODING UNIT
S103 DETERMINE COMPONENT AVERAGE VECTOR INFORMATION OF THE TARGET IMAGE FRAME IN A REFERENCE DIRECTION ON THE BASIS OF COMPONENT VECTOR INFORMATION OF THE MOTION VECTOR INFORMATION OF EACH CODING UNIT IN THE REFERENCE DIRECTION
S104 DETERMINE, ACCORDING TO THE OVERALL AVERAGE VECTOR INFORMATION AND THE COMPONENT AVERAGE VECTOR INFORMATION, A FRAME EXECUTION POLICY OF THE TARGET IMAGE FRAME FOR A MOTION SEARCH OPERATION IN THE REFERENCE DIRECTION, WHEREIN THE FRAME EXECUTION POLICY IS A FRAME START EXECUTION POLICY OR A FRAME SHUTDOWN EXECUTION POLICY

(57) Abstract: Disclosed in the present application are a data coding method and apparatus, and a computer readable storage medium. The method relates to data transmission related technologies in cloud technologies, and comprises: obtaining at least two coding units comprised in a target image frame, and obtaining motion vector information of each of the at least two coding units; determining overall average vector information for the target image frame on the basis of the motion vector information of each coding unit; determining component average vector information of the target image frame in a reference direction on the basis of component vector information

[见续页]

LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX,
MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL,
PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL,
ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US,
UZ, VC, VN, WS, ZA, ZM, ZW。

- (84) 指定国 (除另有指明, 要求每一种可提供的地区
保护): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ,
NA, RW, 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, 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)。

本国际公布:

— 包括国际检索报告 (条约第21条(3))。

of the motion vector information of each coding unit in the reference direction; and determining, according to the overall average vector information and the component average vector information, a frame execution policy of the target image frame for a motion search operation associated with the reference direction, wherein the frame execution policy is a frame start execution policy or a frame shutdown execution policy. The present application can improve the coding speed for the target image frame.

(57) 摘要: 本申请公开了一种数据编码方法、装置以及计算机可读存储介质, 该方法涉及到云技术中的数据传输相关技术, 该方法包括: 获取目标图像帧所包括的至少两个编码单元, 获取至少两个编码单元中的每个编码单元的运动矢量信息; 基于每个编码单元的运动矢量信息, 确定针对目标图像帧的整体平均矢量信息; 基于每个编码单元的运动矢量信息在参考方向上的分量矢量信息, 确定目标图像帧在参考方向上的分量平均矢量信息; 根据整体平均矢量信息和分量平均矢量信息, 确定目标图像帧针对与参考方向相关联的运动搜索操作的帧执行策略; 帧执行策略为帧启动执行策略或帧关闭执行策略。采用本申请, 可提高针对目标图像帧的编码速度。