

(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

(43) 国际公布日
2022 年 6 月 2 日 (02.06.2022)



(10) 国际公布号
WO 2022/111110 A1

(51) 国际专利分类号:
H04N 21/2187 (2011.01) **H04N 21/439** (2011.01)
H04N 21/234 (2011.01) **H04N 21/4402** (2011.01)
H04N 21/239 (2011.01)

(21) 国际申请号: PCT/CN2021/123818

(22) 国际申请日: 2021 年 10 月 14 日 (14.10.2021)

(25) 申请语言: 中文

(26) 公布语言: 中文

(30) 优先权:
202011356995.7 2020 年 11 月 26 日 (26.11.2020) 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: 朱绍明 (ZHU, Shaoming); 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: 深圳市深佳知识产权代理事务所(普通合伙) (SHENPAT INTELLECTUAL PROPERTY AGENCY); 中国广东省深圳市罗湖区南湖街道春风路庐山大厦 B 座 18C2、18D、18E、18E2, Guangdong 518001 (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, 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。

(54) Title: VIRTUAL VIDEO LIVESTREAMING PROCESSING METHOD AND APPARATUS, STORAGE MEDIUM, AND ELECTRONIC DEVICE

(54) 发明名称: 虚拟视频直播处理方法及装置、存储介质、电子设备

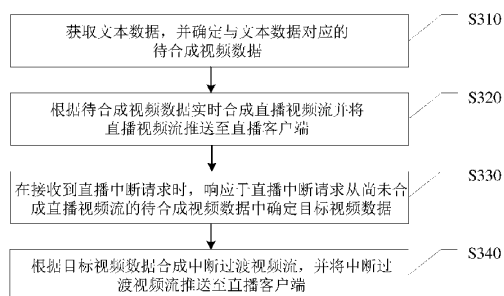


图 3

- S310 Acquire text data, and determine video data to be synthesized that corresponds to the text data
- S320 Synthesize a live streaming video stream in real time according to said video data and push the live streaming video stream to a live streaming client
- S330 Upon receiving a live streaming interrupt request, determine, in response to the live streaming interrupt request, target video data from the video data to be synthesized that has not yet been synthesized into a live streaming video stream
- S340 Synthesize an interrupt transition video stream according to the target video data, and push the interrupt transition video stream to the live streaming client

(57) Abstract: The present application relates to the technical field of virtual video live streaming, and provides a virtual video live streaming processing method and apparatus, an electronic device, and a computer-readable storage medium. The virtual video live streaming processing method comprises: acquiring text data, and determining video data to be synthesized that corresponds to the text data; synthesizing a live streaming video stream in real time according to said video data and pushing the live streaming video stream to a live streaming client; upon receiving a live streaming interrupt request, determining target video data from the video data to be synthesized that has not yet been synthesized into a live streaming video stream; and synthesizing an interrupt transition video stream according to the target video data, and pushing the interrupt transition video stream to the live streaming client. According to the present application, during a virtual video live streaming process, in the case that a live streaming video is interrupted, a smooth transition process from the current video action and the next video action can be achieved without affecting the real-time performance of the live streaming video.

[见续页]

(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))。

(57) 摘要: 本申请提供一种虚拟视频直播处理方法、装置、电子设备、计算机可读存储介质; 涉及虚拟视频直播技术领域。所述虚拟视频直播处理方法包括: 获取文本数据, 并确定与文本数据对应的待合成视频数据; 根据待合成视频数据实时合成直播视频流并将直播视频流推送至直播客户端; 在接收到直播中断请求时, 从尚未合成直播视频流的待合成视频数据中确定目标视频数据; 根据目标视频数据合成中断过渡视频流, 并将中断过渡视频流推送至直播客户端。本申请可以针对虚拟视频直播过程中, 直播视频被中断的情况下, 在不影响直播视频实时性的同时, 实现当前视频动作与下一个视频动作平滑过渡的过程。