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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, 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,

(54) **Title:** SCENE SWITCHING-BASED IMAGE GROUP PARTITIONING METHOD AND APPARATUS, AND VIDEO ENCODING METHOD AND APPARATUS

(54) 发明名称: 基于场景切换的图像组划分方法及装置、视频编码方法及装置

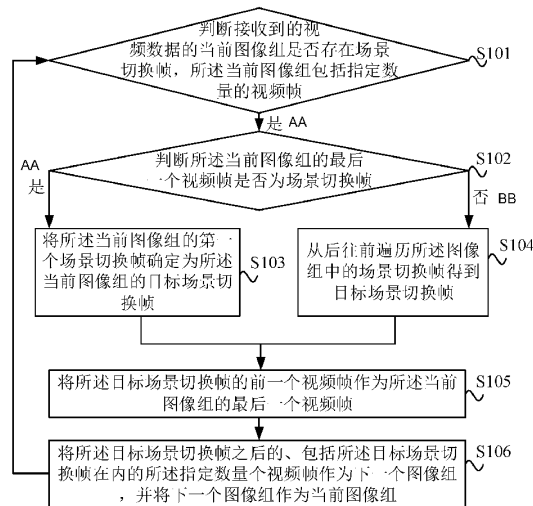


图 1

- S101 Determine whether a scene switching frame is present in the current image group of received video data, the current image group comprising a specified number of video frames
- S102 Determine whether the last video frame of the current image group is a scene switching frame
- S103 Determine the first scene switching frame of the current image group as a target scene switching frame of the current image group
- S104 Traverse the scene switching frames in the image group from back to front to obtain the target scene switching frame
- S105 Use a previous video frame of the target scene switching frame as the last video frame of the current image group
- S106 Use the specified number of video frames that follow the target scene switching frame and comprise the target scene switching frame as the next image group, and use the next image group as the current image group
- AA Yes
- BB No

(57) **Abstract:** Disclosed are a scene switching-based image group partitioning method and apparatus, and a video encoding method and apparatus. The scene switching-based image group partitioning method comprises: determining whether a scene switching frame is present in the received current image group; in response to the fact that at least one scene switching frame is present in the current image group, determining whether the last video frame of the current image group is a scene switching frame, if yes, determining the first scene switching frame of the current image group as a target scene switching frame, and if not, traversing the scene switching frames in the current image group from back to front to obtain the target scene switching frame; using a previous video frame of the

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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, 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)。

根据细则4.17的声明:

- 关于申请人有权申请并被授予专利 (细则4.17(ii))
- 关于申请人有权要求在先申请的优先权 (细则4.17(iii))
- 发明人资格 (细则4.17(iv))

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target scene switching frame as the last video frame of the current image group, using a specified number of video frames that follow the target scene switching frame and comprise the target scene switching frame as the next image group, using the next image group as the current image group, and returning to determine whether a scene switching frame is present in the received current image group.

(57) 摘要: 本文公开了一种基于场景切换的图像组划分方法及装置、视频编码方法及装置。基于场景切换的图像组划分方法包括: 判断接收到的当前图像组是否存在场景切换帧, 响应于当前图像组存在至少一个场景切换帧, 判断当前图像组的最后一个视频帧是否为场景切换帧, 若是, 将当前图像组的第一个场景切换帧确定为目标场景切换帧; 若否, 从后往前遍历当前图像组中的场景切换帧得到目标场景切换帧; 将目标场景切换帧的前一个视频帧作为当前图像组的最后一个视频帧, 将目标场景切换帧之后的、包括目标场景切换帧在内的指定数量个视频帧作为下一图像组, 并将下一个图像组作为当前图像组, 返回执行判断接收到的当前图像组是否存在场景切换帧。