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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: THREE-DIMENSIONAL MODEL RENDERING METHOD AND APPARATUS, ELECTRONIC DEVICE AND STORAGE MEDIUM

(54) 发明名称: 三维模型的渲染方法、装置、电子设备及存储介质

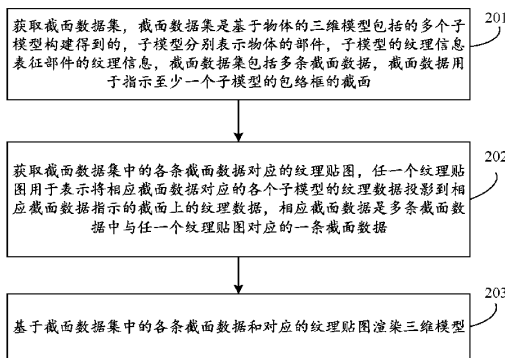


图 2

201 Obtain a cross-sectional data set, wherein the cross-sectional data set is constructed on the basis of a plurality of sub-models comprised in a three-dimensional model of an object; the sub-models respectively represent components of the object, and texture information of the sub-models represents texture information of the components; the cross-sectional data set comprises a plurality of pieces of cross-sectional data, and the cross-sectional data is used for indicating a cross-section of an envelope of at least one sub-model

202 Obtain texture maps corresponding to the pieces of cross-sectional data in the cross-sectional data set, wherein any one of the texture maps represents that texture data of sub-models corresponding to particular cross-sectional data is projected onto texture data on the cross-section indicated by the particular cross-sectional data, and the particular cross-sectional data is one of the plurality of pieces of cross-sectional data that corresponds to any one of the texture maps

203 Render the three-dimensional model on the basis of the pieces of cross-sectional data in the cross-sectional data set and the corresponding texture maps

(57) Abstract: The present application relates to the technical field of image processing, and discloses a three-dimensional model rendering method and apparatus, an electronic device and a storage medium. The method comprises: obtaining a cross-sectional data set, wherein the cross-sectional data set is constructed on the basis of sub-models of a three-dimensional model and comprises cross-sectional data used for indicating a cross-section of an envelope of at least one sub-model; obtaining texture maps corresponding to pieces of cross-sectional data in the cross-sectional data set, wherein the texture maps corresponding to the cross-sectional data are determined according to texture data of sub-models corresponding to the cross-sectional data; and rendering the three-dimensional model on the basis of the pieces of cross-sectional data in the cross-sectional data set and the corresponding texture maps. Since the texture maps represent that the texture data of the sub-models corresponding to the cross-sectional data is projected onto texture data on the cross-section indicated by the cross-sectional data, the texture maps can reflect the textures and shapes of the sub-models, so that the rendering effect can be improved when rendering is performed on the basis of the cross-sectional data and the corresponding texture maps.

(57) 摘要: 本申请公开了一种三维模型的渲染方法、装置、电子设备及存储介质, 属于图像处理技术

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CV, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, MG, MK, MN, MU, 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。

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(15) 更正内容:

见 2024 年 5 月 2 日 (02.05.2024) 公布的公告

领域。方法包括: 获取截面数据集, 截面数据集是基于三维模型的各个子模型构建的且包括的截面数据用于指示至少一个子模型的包络框的截面; 获取截面数据集中的各条截面数据对应的纹理贴图, 截面数据对应的纹理贴图是根据截面数据对应的各个子模型的纹理数据确定的; 基于截面数据集中的各条截面数据和对应的纹理贴图渲染三维模型。由于纹理贴图表示将截面数据对应的各个子模型的纹理数据投影到截面数据指示的截面上的纹理数据, 纹理贴图能反应出各个子模型的纹理和形状, 使得基于截面数据和对应的纹理贴图进行渲染时可以提高渲染效果。