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(54) Title: IMAGE DECODING METHOD AND APPARATUS, AND DEVICE

(54) 发明名称: 图像解码方法、装置及其设备

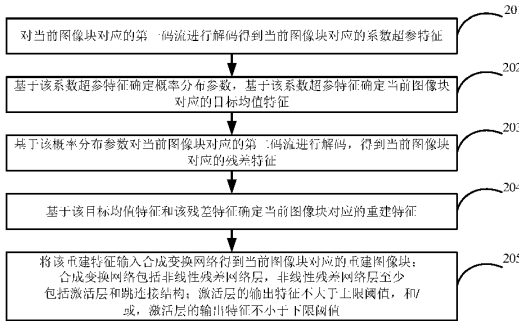


图 2

201 Decode a first code stream corresponding to the current image block to obtain a coefficient hyperparameter feature corresponding to the current image block
202 Determine a probability distribution parameter on the basis of the coefficient hyperparameter feature, and on the basis of the coefficient hyperparameter feature, determine a target mean feature corresponding to the current image block
203 On the basis of the probability distribution parameter, decode a second code stream corresponding to the current image block to obtain a residual feature corresponding to the current image block
204 On the basis of the target mean feature and the residual feature, determine a reconstruction feature corresponding to the current image block
205 Input the reconstruction feature into a synthetic transformation network to obtain a reconstructed image block corresponding to the current image block, wherein the synthetic transformation network comprises a nonlinear residual network layer, and the nonlinear residual network layer at least comprises an activation layer and a skip connection structure; and an output feature of the activation layer is not greater than an upper threshold, and/or, the output feature of the activation layer is not less than a lower threshold

(57) Abstract: The present application provides an image decoding method and apparatus, and a device. The method comprises: decoding a first code stream corresponding to the current image block to obtain a coefficient hyperparameter feature; determining a probability distribution parameter on the basis of the coefficient hyperparameter feature, and determining a target mean feature on the basis of the coefficient hyperparameter feature; on the basis of the probability distribution parameter, decoding a second code stream corresponding to the current image block to obtain a residual feature; determining a reconstruction feature on the basis of the target mean feature and the residual feature; and inputting the reconstruction feature into a synthetic transformation network to obtain a reconstructed image block corresponding to the current image block, wherein the synthetic transformation network comprises a nonlinear residual network layer, and the nonlinear residual network layer comprises an activation layer and a skip connection structure. The technical solution of the present application can improve the decoding performance.

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本国际公布:
— 包括国际检索报告(条约第21条(3))。

(57) 摘要: 本申请提供一种图像解码方法、装置及其设备, 该方法包括: 对当前图像块对应的第一码流进行解码得到系数超参特征; 基于系数超参特征确定概率分布参数, 基于系数超参特征确定目标均值特征; 基于概率分布参数对当前图像块对应的第二码流进行解码得到残差特征; 基于目标均值特征和残差特征确定重建特征; 将重建特征输入合成变换网络得到当前图像块对应的重建图像块; 其中, 合成变换网络包括非线性残差网络层, 非线性残差网络层包括激活层和跳连接结构。通过本申请技术方案, 能够提高解码性能。