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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,

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

(54) 发明名称: 图像解码和编码方法、装置、设备及存储介质

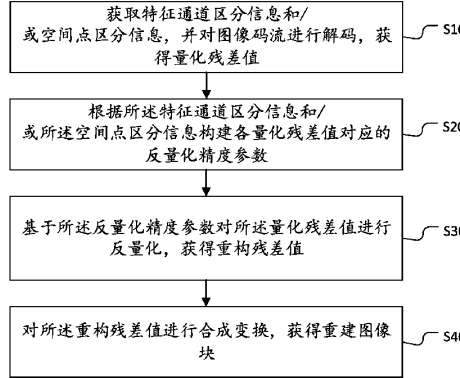


图 2

- S10 Obtain feature channel distinguishing information and/or spatial point distinguishing information, and decode image code streams to obtain quantized residual values
- S20 Set corresponding inverse quantization precision parameter value for each quantized residual value according to feature channel distinguishing information and/or spatial point distinguishing information
- S30 Perform inverse quantization on quantization residual values according to inverse quantization precision parameter values to obtain reconstructed residual values
- S40 Perform synthetic transformation on reconstructed residual values to obtain reconstructed image block

(57) Abstract: The present disclosure relates to the technical field of image processing and discloses an image decoding and encoding method and apparatus, a device and a storage medium. In the present disclosure, feature channel distinguishing information and/or spatial point distinguishing information are obtained, and image code streams are decoded to obtain quantized residual values; an inverse quantization precision parameter value is set for each quantized residual value according to the feature channel distinguishing information and/or the spatial point distinguishing information; inverse quantization is performed on the quantization residual values according

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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, CV, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, 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, ME, 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)。

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to the inverse quantization precision parameter values to obtain reconstructed residual values; synthetic transformation is performed on the reconstructed residual values to obtain a reconstructed image block. Since corresponding inverse quantization precision parameter values are constructed based on the feature channel distinguishing information and/or the spatial point distinguishing information for inverse quantization, during the encoding process, different quantization parameter values can also be set according to the different feature channels and spatial point image textures, such that more important features are subject to smaller quantization losses, which improves the performance of encoding and decoding.

(57) 摘要: 本公开属于图像处理技术领域, 公开了一种图像解码和编码方法、装置、设备及存储介质。本公开通过获取特征通道区分信息和/或空间点区分信息, 并对图像码流进行解码, 获得量化残差值; 根据特征通道区分信息和/或所述空间点区分信息构建各量化残差值对应的反量化精度参数; 基于反量化精度参数对量化残差值进行反量化, 获得重构残差值; 对重构残差值进行合成变换, 获得重建图像块。由于是根据特征通道区分信息和/或空间点区分信息构建对应的反量化精度参数进行反量化, 使得在编码过程中也可以根据特征通道和空间点图像纹理的差异设置不同的量化参数, 令更重要的特征承担较小的量化损失, 从而提高了编码及解码的性能。