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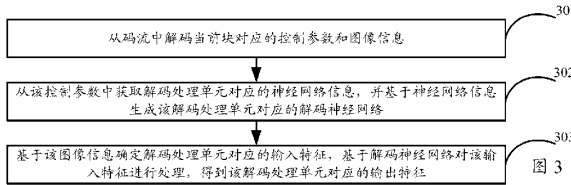
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(54) Title: IMAGE DECODING METHOD AND APPARATUS BASED ON NEURAL NETWORK, IMAGE ENCODING METHOD AND APPARATUS BASED ON NEURAL NETWORK, AND DEVICE THEREOF

(54) 发明名称: 一种基于神经网络的图像解码、编码方法、装置及其设备



- 301 Decode, from a code stream, a control parameter and image information, which correspond to the current block
- 302 Acquire, from the control parameter, neural network information corresponding to a decoding processing unit, and on the basis of the neural network information, generate a decoding neural network corresponding to the decoding processing unit
- 303 On the basis of the image information, determine an input feature corresponding to the decoding processing unit, and process the input feature on the basis of the decoding neural network, so as to obtain an output feature corresponding to the decoding processing unit

(57) Abstract: Provided in the present disclosure are an image decoding method and apparatus based on a neural network, an image encoding method and apparatus based on a neural network, and a device thereof. The image decoding method comprises: decoding, from a code stream, a control parameter and image information, which correspond to the current block; acquiring, from the control parameter, neural network information corresponding to a decoding processing unit, and on the basis of the neural network information, generating a decoding neural network corresponding to the decoding processing unit; and on the basis of the image information, determining an input feature corresponding to the decoding processing unit, and processing the input feature on the basis of the decoding neural

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network, so as to obtain an output feature corresponding to the decoding processing unit. By means of the present disclosure, the encoding performance and the decoding performance can be improved.

(57) 摘要: 本公开提供一种基于神经网络的图像解码、编码方法、装置及其设备, 该方法包括: 从码流中解码当前块对应的控制参数和图像信息; 从所述控制参数中获取解码处理单元对应的神经网络信息, 基于所述神经网络信息生成解码处理单元对应的解码神经网络; 基于所述图像信息确定所述解码处理单元对应的输入特征, 基于所述解码神经网络对所述输入特征进行处理, 得到所述解码处理单元对应的输出特征。通过本公开能够提高编码性能和解码性能。