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(71) 申请人: 华为技术有限公司 (HUAWEI TECHNOLOGIES CO., LTD.) [CN/CN]; 中国广东省深圳市龙岗区坂田华为总部办公楼, Guangdong 518129 (CN)。

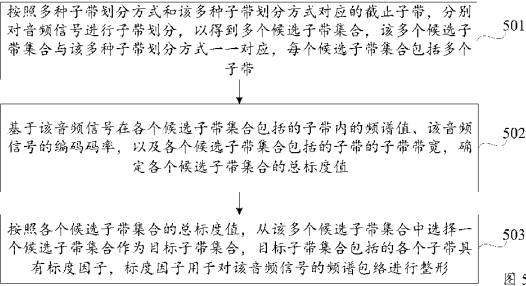
(72) 发明人: 王卓 (WANG, Zhuo); 中国广东省深圳市龙岗区坂田华为总部办公楼, Guangdong 518129 (CN)。冯斌 (FENG, Bin); 中国广东省深圳市龙岗区坂田华为总部办公楼, Guangdong 518129 (CN)。杜春晖 (DU, Chunhui); 中国广东省深圳市龙岗区坂田华为总部办公楼, Guangdong 518129 (CN)。范泛 (FAN, Fan); 中国广东省深圳市龙岗区坂田华为总部办公楼, Guangdong 518129 (CN)。

(74) 代理人: 北京三高永信知识产权代理有限公司 (BEIJING SAN GAO YONG XIN INTELLECTUAL PROPERTY AGENCY CO., LTD.); 中国北京市海淀区上地信息产业基地三街 1 号楼四层 C 段 457, Beijing 100085 (CN)。

(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: AUDIO SIGNAL PROCESSING METHOD AND APPARATUS, STORAGE MEDIUM, AND COMPUTER PROGRAM PRODUCT

(54) 发明名称: 音频信号的处理方法、装置、存储介质及计算机程序产品



501 Respectively perform sub-band division on an audio signal according to a plurality of sub-band division modes and cut-off sub-bands corresponding to the plurality of sub-band division modes to obtain a plurality of candidate sub-band sets, wherein the plurality of candidate sub-band sets have one-to-one correspondence to the plurality of sub-band division modes, and each candidate sub-band set comprises a plurality of sub-bands

502 On the basis of spectrum values of the audio signal in sub-bands comprised in each candidate sub-band set, an encoding code rate of the audio signal, and the bandwidth of the sub-bands comprised in each candidate sub-band set, determine a total scale value of each candidate sub-band set

503 According to the total scale value of each candidate sub-band set, select one candidate sub-band set from the plurality of candidate sub-band sets as a target sub-band set, wherein each sub-band comprised in the target sub-band set has a scale factor, and the scale factor is used for shaping a spectral envelope of the audio signal

图 5

(57) Abstract: An audio signal processing method and apparatus (1100), a storage medium, and a computer program product, relating to the field of audio encoding and decoding. According to the characteristics of an audio signal, an optimal sub-band division mode is selected from a plurality of sub-band division modes, that is, the sub-band division mode has the characteristic of signal self-adaptation, and can adapt to an encoding code rate of the audio signal, thereby improving the anti-interference capability. Division is first performed on an audio signal according to a plurality of sub-band division modes, respectively, and then a total scale value corresponding to each sub-band division mode is determined on the basis of a spectrum value of the audio signal in each sub-band obtained by the division, the bandwidth of each sub-band, and an encoding code rate of the audio signal, and an optimal target sub-band division mode is selected on the basis of the total scale value to obtain an optimal sub-band set. Subsequently, spectral envelope shaping is performed according to a scale factor of each sub-band in the optimal sub-band set, thereby improving the encoding effect and the compression efficiency.

(57) 摘要: 一种音频信号的处理方法、装置 (1100)、存储介质及计算机程序产品, 属于音频编解码领域。按照音频信号的特点, 从多种子带划分方式选择最佳的子带划分方式, 即子带划分方式具有信号自适应的特点, 能够自适应音频信号的编码码率, 从而提高抗干扰能力。先按照多种子带划分方式分别对音频信号进行划分, 再基于音频信号在所划分出各个子带内频谱值、各个子带的带宽以及音频信号的编码码率, 确定每种子带划分方式所对应的总标度值, 基于总标度值选择最佳的目标子带划分方式, 即得到最佳的子带集合。后续按照最佳的子带集合中各个子带的标度因子来进行频谱包络整形, 能够提升编码效果和压缩效率。

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