

(12) 按照专利合作条约所公布的国际申请

(19) 世界知识产权组织
国际局

(43) 国际公布日
2020年3月12日 (12.03.2020)



(10) 国际公布号
WO 2020/048507 A1

(51) 国际专利分类号:
H04N 19/186 (2014.01)

(21) 国际申请号: PCT/CN2019/104527

(22) 国际申请日: 2019年9月5日 (05.09.2019)

(25) 申请语言: 中文

(26) 公布语言: 中文

(30) 优先权:
201811035923.5 2018年9月5日 (05.09.2018) CN

(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: 马祥 (MA, Xiang); 中国广东省深圳市龙岗区坂田华为总部办公楼, Guangdong 518129 (CN)。 杨海涛 (YANG, Haitao); 中国广

东省深圳市龙岗区坂田华为总部办公楼, Guangdong 518129 (CN)。 陈建乐 (CHEN, Jianle); 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: 广州三环专利商标代理有限公司 (SCIHEAD IP LAW FIRM); 中国广东省广州市越秀区先烈中路80号汇华商贸大厦1508室, Guangdong 510070 (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, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, 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,

(54) Title: METHOD AND DEVICE FOR PREDICTING CHROMA BLOCKS

(54) 发明名称: 色度块预测方法以及设备

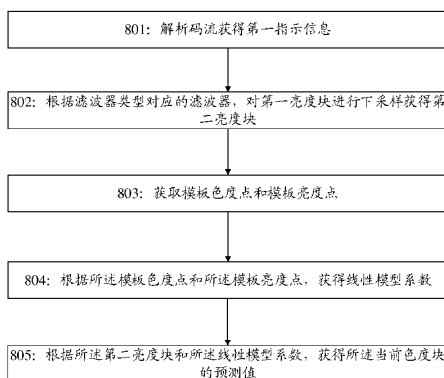


图 13

- 801 Parse a code stream to acquire first indication information
802 On the basis of the filter corresponding to the filter type, perform down-sampling on a first brightness block to acquire a second brightness block
803 Acquire a template chroma point and a template brightness point
804 On the basis of the template chroma point and the template brightness point, acquire a linear model coefficient
805 On the basis of the second brightness block and the linear model coefficient, acquire a prediction value of the current chroma block

(57) Abstract: Provided in the present invention are a method and a device for preventing chroma blocks, the method comprising: parsing a code stream to acquire first indication information, the first indication information being used for indicating a filter type; on the basis of the filter corresponding to the filter type, performing down-sampling on a first brightness block to acquire a second brightness block, the first brightness block being a brightness block corresponding to a current chroma block; acquiring a template chroma point and a template brightness point, the template chroma point comprising a plurality of chroma pixel points adjacent to the current chroma block, the template brightness point being acquired by performing down-sampling on a plurality of brightness pixel points adjacent to the first brightness block; on the basis of the template chroma point and the template brightness point, acquiring a linear model coefficient; and, on the basis of the second brightness block and the linear model coefficient, acquiring a prediction value of the current chroma block.

(57) 摘要: 本发明提供了色度块预测方法及设备, 该方法包括: 解析码流获得第一指示信息, 第一指示信息用于指示滤波器类型; 根据滤波器类型对应的滤波器, 对第一亮度块进行下采样, 获得第二亮度块, 第一亮度块是当前色度块对应的亮度块; 获取模板色度点和模板亮度点, 模板色度点包括当前色度块相邻的多个色度像素点, 模板亮度点通过对第一亮度块相邻的多个亮度像素点进行下采样操作获得; 根据模板色度点和模板亮度点, 获得线性模型系数; 根据第二亮度块和线性模型系数, 获得当前色度块的预测值。

[见续页]

SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG,
US, UZ, VC, VN, ZA, ZM, ZW。

(84) 指定国 (除另有指明, 要求每一种可提供的地区
保护): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ,
NA, RW, 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, 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)。

本国际公布:

— 包括国际检索报告 (条约第21条(3))。