

(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



(10) 国际公布号
WO 2024/217460 A1

(43) 国际公布日
2024 年 10 月 24 日 (24.10.2024) **WIPO | PCT**

- (51) 国际专利分类号:
H04N 19/136 (2014.01) *G06N 3/02* (2006.01)
- (21) 国际申请号: PCT/CN2024/088327
- (22) 国际申请日: 2024 年 4 月 17 日 (17.04.2024)
- (25) 申请语言: 中文
- (26) 公布语言: 中文
- (30) 优先权:
202310445159.3 2023 年 4 月 20 日 (20.04.2023) CN
- (71) 申请人: 杭州海康威视数字技术股份有限公司 (HANGZHOU HIKVISION DIGITAL TECHNOLOGY CO., LTD.) [CN/CN]; 中国浙江省杭州市滨江区阡陌路 555 号, Zhejiang 310051 (CN)。
- (72) 发明人: 刘昀卓 (LIU, Yunzhuo); 中国浙江省杭州市滨江区阡陌路 555 号, Zhejiang 310051 (CN)。陈方栋 (CHEN, Fangdong); 中国浙江省杭州市滨江区阡陌路 555 号, Zhejiang 310051 (CN)。王莉 (WANG, Li); 中国浙江省杭州市滨江区阡陌路 555 号, Zhejiang 310051 (CN)。武晓阳 (WU, Xiaoyang); 中国浙江省杭州市滨江区阡陌路 555 号, Zhejiang 310051 (CN)。
- (74) 代理人: 北京博思佳知识产权代理有限公司 (BEIJING BESTIPR INTELLECTUAL PROPERTY LAW CORPORATION); 中国北京市海淀区上地三街 9 号嘉华大厦 B 座 409, 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,

(54) Title: DECODING METHOD AND APPARATUS, CODING METHOD AND APPARATUS, AND DEVICES

(54) 发明名称: 一种解码、编码方法、装置及其设备

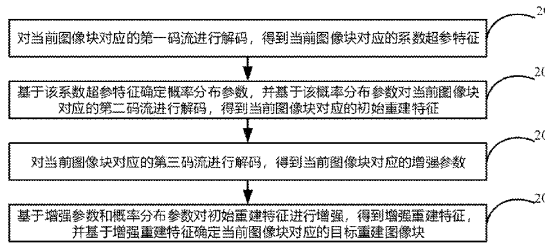


图 2

- 201 Decode a first code stream corresponding to the current image block, so as to obtain a coefficient hyper-parameter feature corresponding to the current image block
- 202 Determine a probability distribution parameter on the basis of the coefficient hyper-parameter feature, and on the basis of the probability distribution parameter, decode a second code stream corresponding to the current image block, so as to obtain an initial reconstruction feature corresponding to the current image block
- 203 Decode a third code stream corresponding to the current image block, so as to obtain an enhancement parameter corresponding to the current image block
- 204 Enhance the initial reconstruction feature on the basis of the enhancement parameter and the probability distribution parameter, so as to obtain an enhanced reconstruction feature, and on the basis of the enhanced reconstruction feature, determine a target constructed image block corresponding to the current image block

(57) Abstract: Provided in the present application are a decoding method and apparatus, a coding method and apparatus, and devices. The decoding method comprises: decoding a code stream corresponding to the current image block, so as to obtain a coefficient hyper-parameter feature corresponding to the current image block; determining a probability distribution parameter on the basis of the coefficient hyper-parameter feature; on the basis of the probability distribution parameter, decoding a code stream corresponding to the current image block, so as to obtain an initial reconstruction feature corresponding to the current image block; and on the basis of the

[见续页]

BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CV, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, MG, MK, MN, MU, 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, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, 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, 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)。

本国际公布:

— 包括国际检索报告(条约第21条(3))。

initial reconstruction feature, determining a target reconstructed image block corresponding to the current image block. By means of the technical solution of the present application, the coding performance and the decoding performance can be improved.

(57) 摘要: 本申请提供一种解码、编码方法、装置及其设备。该解码方法包括: 对当前图像块对应的码流进行解码, 得到所述当前图像块对应的系数超参特征; 基于所述系数超参特征确定概率分布参数; 基于所述概率分布参数对所述当前图像块对应的码流进行解码, 得到所述当前图像块对应的初始重建特征; 基于所述初始重建特征确定所述当前图像块对应的目标重建图像块。通过本申请技术方案, 能够提高编码性能和解码性能。