

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau

(43) International Publication Date  
12 October 2023 (12.10.2023)



(10) International Publication Number  
**WO 2023/196013 A1**

(51) International Patent Classification:  
*H04N 19/573* (2014.01) *H04N 19/513* (2014.01)  
*H04N 19/30* (2014.01)

(21) International Application Number:  
PCT/US2022/049786

(22) International Filing Date:  
14 November 2022 (14.11.2022)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
63/328,508 07 April 2022 (07.04.2022) US  
17/982,991 08 November 2022 (08.11.2022) US

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(81) Designated States (*unless otherwise indicated, for every  
kind of national protection available*): AE, AG, AL, AM,  
AO, AT, AU, AZ, BA, BB, BG, 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, MW, MX, MY, MZ, NA, NG,

(54) Title: SYSTEMS AND METHODS FOR JOINT CODING OF MOTION VECTOR DIFFERENCE USING TEMPLATE  
MATCHING BASED SCALING FACTOR DERIVATION

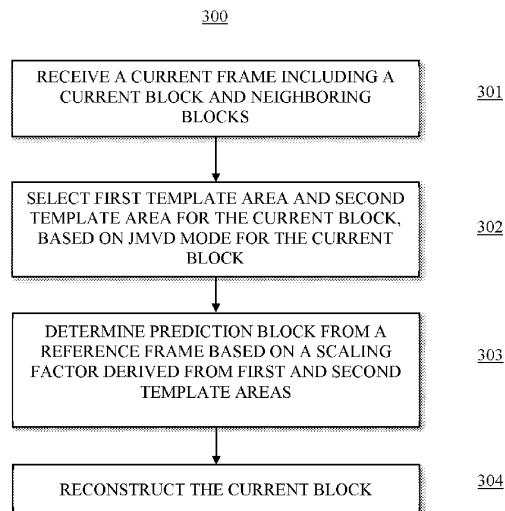


FIG. 3

(57) Abstract: Systems and methods for joint coding of motion vector difference using template matching based scaling factor derivation include receiving a current frame in a video bitstream, determining that a current block in the current frame is coded in a joint motion vector difference (JMVD) mode, selecting first neighboring reconstructed samples and second neighboring reconstructed samples of the current block as template areas used for predicting the current block in the JVMD mode, determining a prediction block from a reference frame based on a scaling factor derived from the selected template areas and applied to a motion vector difference (MVD) associated with the current block, and reconstructing the current block in the JVMD mode based at least on the prediction block.

[Continued on next page]

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) Designated States** (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, CV, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (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).

**Published:**

— with international search report (Art. 21(3))