

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
11 October 2007 (11.10.2007)

PCT

(10) International Publication Number
WO 2007/115126 A1

(51) International Patent Classification:
H04N 7/46 (2006.01) **H04N 7/36** (2006.01)

(21) International Application Number:
PCT/US2007/065547

(22) International Filing Date: 29 March 2007 (29.03.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/789,319 4 April 2006 (04.04.2006) US
60/795,038 25 April 2006 (25.04.2006) US
11/558,833 10 November 2006 (10.11.2006) US

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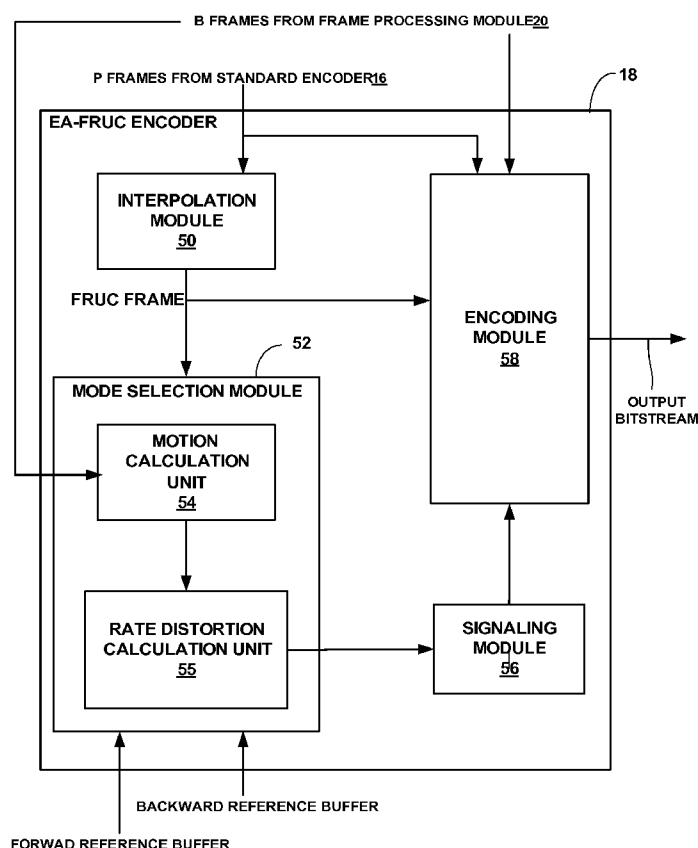
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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,

[Continued on next page]

(54) Title: ADAPTIVE ENCODER-ASSISTED FRAME RATE UP CONVERSION



(57) Abstract: This disclosure describes adaptive video encoding and decoding techniques for encoder-assisted frame rate up-conversion (EA-FRUC). An encoder selectively encodes at least a portion of a video frame, such as a block, using an interpolated FRUC frame as a reference. The encoder interpolates at least a portion of the FRUC frame at the same time instance as the yet to be encoded video frame, and selects one of a plurality of FRUC encoding modes for that portion, e.g., based on rate distortion (RD). The encoder encodes the frame using the selected FRUC encoding mode, the FRUC reference frame, and any additional reference frames that may be indicated. A decoder interpolates the FRUC frame and uses it or decoding with knowledge of the particular FRUC mode that was used by the encoder. The encoder communicates the FRUC mode for a block via one or more existing parameters in the encoded video frame.



ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

Published:

- *with international search report*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

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