

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
27 March 2003 (27.03.2003)

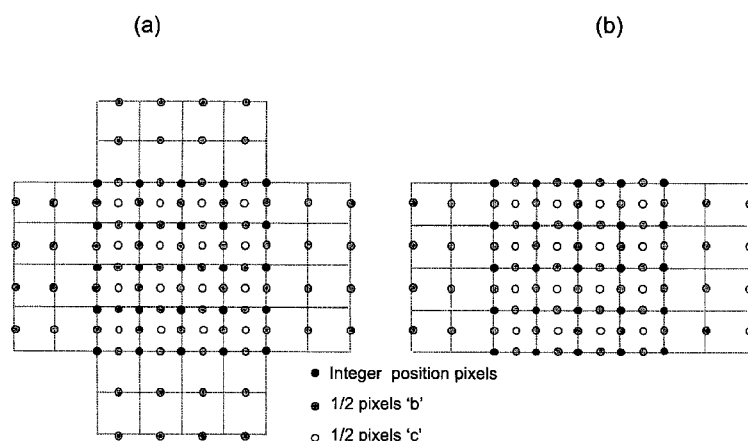
PCT

(10) International Publication Number
WO 03/026296 A1

- (51) International Patent Classification⁷: **H04N 7/01**, 7/46, G06T 3/40
- (21) International Application Number: PCT/FI02/00729
- (22) International Filing Date:
11 September 2002 (11.09.2002)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
09/954,608 17 September 2001 (17.09.2001) US
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- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:**
— with international search report

[Continued on next page]

(54) Title: METHOD FOR SUB-PIXEL VALUE INTERPOLATION



(57) Abstract: A method of interpolation in video coding in which an image comprising pixels arranged in rows and columns and represented by values having a specified dynamic range, the pixels in the rows residing at unit horizontal locations and the pixels in the columns residing at unit vertical locations, is interpolated to generate values for sub-pixels at fractional horizontal and vertical locations, the method comprising: a) when values for sub-pixels at half unit horizontal and unit vertical locations, and unit horizontal and half unit vertical locations are required, interpolating such values directly using weighted sums of pixels residing at unit horizontal and unit vertical locations; b) when values for sub-pixels at half unit horizontal and half unit vertical locations are required, interpolating such values directly using a weighted sum of values for sub-pixels residing at half unit horizontal and unit vertical locations calculated according to step (a); and c) when values for sub-pixels at quarter unit horizontal and quarter unit vertical locations are required, interpolating such values by taking the average of at least one pair of a first pair of values of a sub-pixel located at a half unit horizontal and unit vertical location, and a sub-pixel located at a unit horizontal and half unit vertical location and a second pair of values of a pixel located at a unit horizontal and unit vertical location, and a sub-pixel located at a half unit horizontal and half unit vertical location.



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