

(12) International Application Status Report

Received at International Bureau: 29 June 2018 (29.06.2018)

Information valid as of: 13 February 2019 (13.02.2019)

Report generated on: 19 April 2019 (19.04.2019)

(10) Publication number:

WO2019/002171

(43) Publication date:

03 January 2019 (03.01.2019)

(26) Publication language:

English (EN)

(21) Application Number:

PCT/EP2018/066880

(22) Filing Date:

25 June 2018 (25.06.2018)

(25) Filing language:

English (EN)

(31) Priority number(s):

17305794.4 (EP)

(31) Priority date(s):

26 June 2017 (26.06.2017)

(31) Priority status:

Priority document received (in compliance with PCT Rule 17.1)

17305921.3 (EP)

12 July 2017 (12.07.2017)

Priority document received (in compliance with PCT Rule 17.1)

(51) International Patent Classification:

H04N 19/593 (2014.01); *H04N 19/159* (2014.01)

(71) Applicant(s):

INTERDIGITAL VC HOLDINGS, INC. [US/US]; 200 Bellevue Parkway Suite 300 Wilmington, Delaware 19809 (US) (*for all designated states*)

(72) Inventor(s):

POIRIER, Tangi; c/o Technicolor 975, avenue des Champs Blancs CS 17616 35576 CESSON-SEVIGNE (FR)
RATH, Gagan; c/o Technicolor 975, avenue des Champs Blancs CS 17616 35576 CESSON-SEVIGNE (FR)
URBAN, Fabrice; c/o Technicolor 975, avenue des Champs Blancs CS 17616 35576 CESSON-SEVIGNE (FR)

(74) Agent(s):

HUCHET, Anne; TECHNICOLOR 1-5, rue Jeanne d'Arc 92130 Issy-les-Moulineaux (FR)

(54) Title (EN): METHOD AND APPARATUS FOR INTRA PREDICTION WITH MULTIPLE WEIGHTED REFERENCES

(54) Title (FR): PROCÉDÉ ET APPAREIL DE PRÉDICTION INTRA À MULTIPLES RÉFÉRENCES PONDÉRÉES

(57) Abstract:

(EN): A method of performing intra prediction for encoding or decoding uses multiple layers of reference samples. The layers are formed into reference arrays that are used by a function, such as a weighted combination, to form a final prediction. The prediction is used in encoding or decoding a block of video data. The weights can be determined in a number of ways, and for a given prediction mode, the same weights, or different weights can be used for all pixels in a target block. If the weights are varied, they can depend on the distance of the target pixel from reference arrays.

(FR): L'invention concerne un procédé de réalisation d'une prédiction intra pour un codage ou un décodage, utilisant de multiples couches d'échantillons de référence. Les couches sont formées en matrices de référence qui sont utilisées par une fonction, comme une combinaison pondérée, pour former une prédiction finale. La prédiction est utilisée pour coder ou décoder un bloc de données vidéo. Les pondérations peuvent être déterminées de plusieurs manières et, pour un mode de prédiction donné, les mêmes pondérations, ou des pondérations différentes, peuvent être utilisées pour tous les pixels dans un bloc cible. Si les pondérations sont variées, elles peuvent dépendre de la distance du pixel cible aux matrices de référence.

International search report:

Received at International Bureau: 30 July 2018 (30.07.2018) [EP]

International Report on Patentability (IPRP) Chapter II of the PCT:

Not available

(81) Designated States:

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

European Patent Office (EPO) : 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

African Intellectual Property Organization (OAPI) : BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG

African Regional Intellectual Property Organization (ARIPO) : BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW

Eurasian Patent Organization (EAPO) : AM, AZ, BY, KG, KZ, RU, TJ, TM

Declarations:

Declaration made as applicant's entitlement, as at the international filing date, to apply for and be granted a patent (Rules 4.17(ii) and 51bis.1(a)(ii)), in a case where the declaration under Rule 4.17(iv) is not appropriate