

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
09 April 2020 (09.04.2020)



(10) International Publication Number
WO 2020/072494 A1

(51) International Patent Classification:

H04N 19/119 (2006.01) H04N 19/44 (2014.01)
H04N 19/176 (2014.01)

(21) International Application Number:

PCT/US2019/054069

(22) International Filing Date:

01 October 2019 (01.10.2019)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

62/739,446	01 October 2018 (01.10.2018)	US
62/739,677	01 October 2018 (01.10.2018)	US
62/739,531	01 October 2018 (01.10.2018)	US

(71) Applicant: **OP SOLUTIONS, LLC** [US/US]; 31 Jackson Terrace, Newton, Massachusetts 02458 (US).

(72) Inventors: **KALVA, Hari**; 777 Glades Road, Boca Raton, FL 33431 (US). **FURHT, Borivoje**; 777 Glades Road, Boca Raton, Florida 33431 (US).

(74) Agent: **DRAYTON, Micah**; 100 High Street, Boston, Massachusetts 02110 (US).

(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, 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.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available):

ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, 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, 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).

Declarations under Rule 4.17:

— of inventorship (Rule 4.17(iv))

(54) Title: METHODS AND SYSTEMS OF EXPONENTIAL PARTITIONING

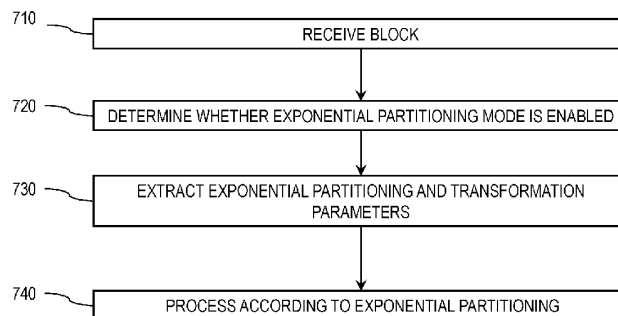


FIG. 7

(57) Abstract: A decoder includes a circuitry configured to receive a bitstream, determine whether an exponential partitioning mode is enabled, partition a block into a first region and a second region according to a curved line, and reconstruct pixel data of the block and using the curved line, the first region and the second region being non-rectangular.

[Continued on next page]

Published:

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