

(51) International Patent Classification:
H04N 19/13 (2014.01) *G06T 9/00* (2006.01)(21) International Application Number:
PCT/CN2021/123661(22) International Filing Date:
13 October 2021 (13.10.2021)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
21305460.4 09 April 2021 (09.04.2021) EP(71) Applicant: **BEIJING XIAOMI MOBILE SOFTWARE CO., LTD.**, [CN/CN]; No. 018, Floor 8, Building 6, Yard 33, Middle Xierqi Road, Haidian District, Beijing 100085 (CN).(72) Inventors: **LASSERRE, Sebastien**; No. 018, Floor 8, Building 6, Yard 33, Middle Xierqi Road, Haidian District, Beijing 100085 (CN). **TAQUET, Jonathan**; No. 018, Floor 8, Building 6, Yard 33, Middle Xierqi Road, Haidian District, Beijing 100085 (CN).(74) Agent: **TSINGYIHUA INTELLECTUAL PROPERTY LLC**; Room 201, 2nd Floor, Building 1, No. 45, Beiwa Road, Haidian District, Beijing 100142 (CN).

(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, IT, 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, 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, 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).

(54) Title: METHOD AND APPARATUS OF ENCODING/DECODING POINT CLOUD GEOMETRY DATA CAPTURED BY A SPINNING SENSORS HEAD

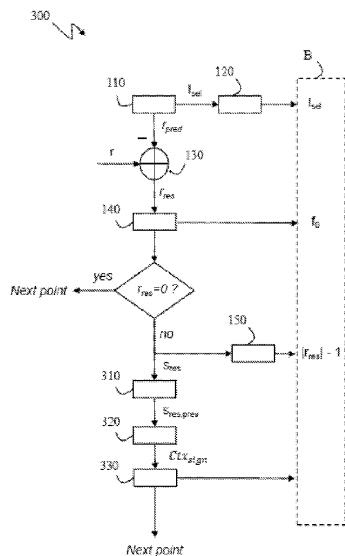


Fig. 10

(57) Abstract: There is provided methods and apparatus of encoding/decoding a point cloud representing a physical object, each point of the point cloud being associated with a residual radius between a radius responsive to a distance of the point from a referential and a predicted radius. The method entropy encodes/decodes the sign of the residual radius associated with a current point of the point cloud based on the sign of a previously entropy encoded/decoded non-zero residual radius associated with a previous point.

Published:

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