



(51) International Patent Classification:
G06T 9/40 (2006.01)

(21) International Application Number:
PCT/US2021/029691

(22) International Filing Date:
28 April 2021 (28.04.2021)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
63/034,113 03 June 2020 (03.06.2020) US
63/066,099 14 August 2020 (14.08.2020) US
17/231,695 15 April 2021 (15.04.2021) US

(71) Applicant: **TENCENT AMERICA LLC** [US/US]; 2747
Park Boulevard, Palo Alto, California 94306 (US).

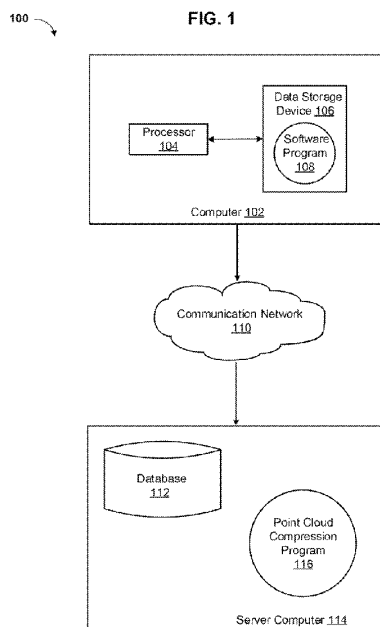
(72) Inventors: **ZHANG, Xiang**; c/o TENCENT AMERICA
LLC, 2747 Park Boulevard, Palo Alto, California 94306
(US). **GAO, Wen**; c/o TENCENT AMERICA LLC, 2747
Park Boulevard, Palo Alto, California 94306 (US). **LIU,
Shan**; c/o TENCENT AMERICA LLC, 2747 Park Boule-
vard, Palo Alto, California 94306 (US).

(74) Agent: **MA, Johnny** et al.; Oblon, McClelland, Maier &
Neustadt, L.L.P., 1940 Duke Street, Alexandria, Virginia
22314 (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, 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: CONTEXT MODELING OF OCCUPANCY CODING FOR POINT CLOUD CODING



(57) Abstract: A method, computer program, and computer system is provided for decoding point cloud data. Data corresponding to a point cloud is received. A number of contexts associated with the received data is reduced based on occupancy data corresponding to one or more parent nodes and one or more child nodes within the received data. The data corresponding to the point cloud is decoded based on the reduced number of contexts.

Published:

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