

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
10 February 2022 (10.02.2022)



(10) International Publication Number
WO 2022/031232 A1

(51) International Patent Classification:
G06K 9/62 (2006.01) *B25J 9/16* (2006.01)
G06N 3/02 (2006.01)

(21) International Application Number:
PCT/SG2021/050456

(22) International Filing Date:
04 August 2021 (04.08.2021)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10202007453U 04 August 2020 (04.08.2020) SG

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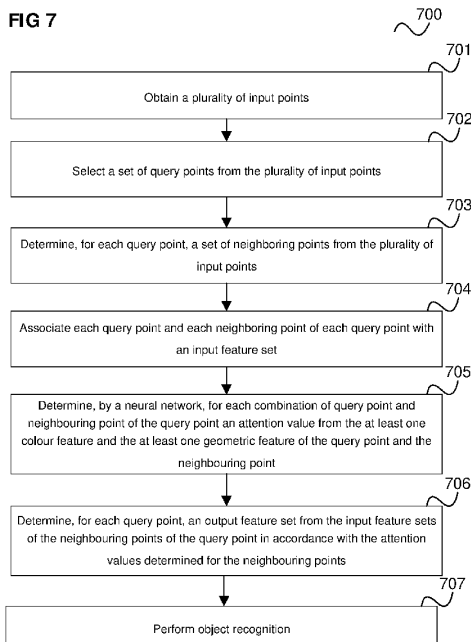
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(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, 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 DEVICE FOR POINT CLOUD BASED OBJECT RECOGNITION

FIG 7



(57) Abstract: According to one embodiment, a method for object recognition is described comprising obtaining a plurality of input points in three dimensional space wherein each point of the plurality of input points has at least one colour feature and at least one geometric feature, selecting a set of query points from the plurality of input points, determining, for each query point, a set of neighbouring points from the plurality of input points, associating each query point with a respective input feature set and each neighbouring point of each query point with a respective input feature set, determining, by a neural network, for each combination of query point and neighbouring point of the query point an attention value from the at least one colour feature and the at least one geometric feature of the query point and the neighbouring point, determining, for each query point, an output feature set from the input feature sets of the neighbouring points of the query point in accordance with the attention values determined for the neighbouring points and performing object recognition based on the output feature set of the query points.

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Published:

- with international search report (Art. 21(3))
- in black and white; the international application as filed contained color or greyscale and is available for download from PATENTSCOPE