



(51) International Patent Classification:
G06F 16/901 (2019.01)

(21) International Application Number:
PCT/CN2024/136838

(22) International Filing Date:
04 December 2024 (04.12.2024)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
202311685206.8 08 December 2023 (08.12.2023) CN

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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, CV, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, MG, MK, MN, MU, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO,

(54) Title: ACTION-BASED GRAPH FRAMEWORK AND QUERY METHOD

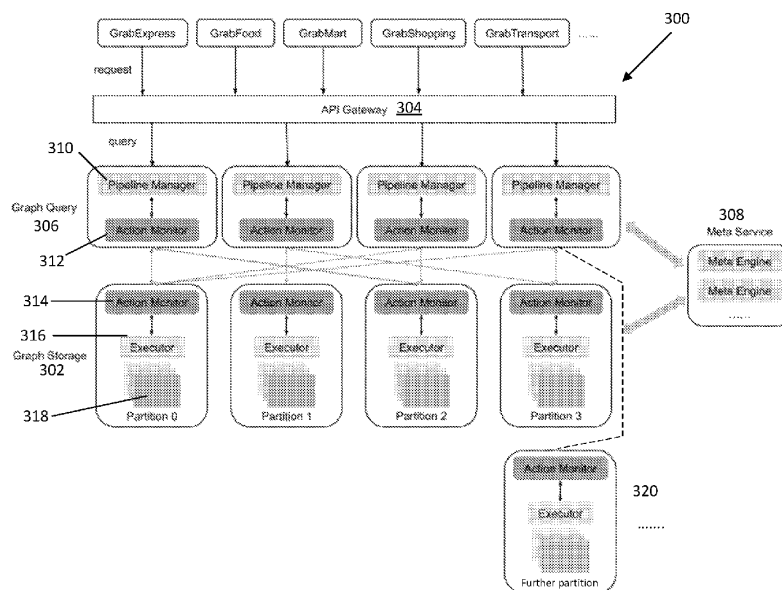


Figure 3

(57) Abstract: Disclosed is a network and method for creating and searching a graph in a massively parallel manner. The network includes a plurality of graph storage instances that collectively store a graph formed from a plurality of entities and comprising a vertex for each entity, edges connecting pairs of vertices, and adjacency relations. Each graph storage instance stores a subgraph of the graph and comprises a partition with a non-overlapping vertex set of all the vertices in the respective subgraph, an edge set of all the edges between vertices in the respective vertex set, and the adjacency relations for the edge set and to any edges outside the partition, to which the edge set connects. Each graph storage instance also includes an executor for executing one or more of the actions over the respective subgraph, and an action monitor for supplying actions to the respective executor.

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, CV, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, 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, ME, 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).

Published:

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