



(51) International Patent Classification:

G06F 21/60 (2013.01) G06F 12/14 (2006.01)
G06F 21/62 (2013.01)

(21) International Application Number:

PCT/US2024/026796

(22) International Filing Date:

29 April 2024 (29.04.2024)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/462,756 28 April 2023 (28.04.2023) US

(71) Applicant: **VISA INTERNATIONAL SERVICE ASSOCIATION** [US/US]; P.O. Box 8999, San Francisco, California 94128 (US).

(72) Inventors: **CHEN, Hanlin**; Visa International Service Association, P.O. Box 8999, San Francisco, California 94128 (US). **FEDRONIC, Dominique, Louis**; Visa International Service Association, P.O. Box 8999, San Francisco, California 94128 (US). **FRANCIS, Aadithya, Jerome Prabhakar**; Visa International Service Association, P.O. Box 8999, San Francisco, California 94128 (US). **MIGLANI, Gaurav**; Visa International Service Association, P.O. Box

8999, San Francisco, California 94128 (US). **OH, Bee Ching**; Visa International Service Association, P.O. Box 8999, San Francisco, California 94128 (US).

(74) Agent: **PREPELKA, Nathan, J.** et al.; The Webb Law Firm, One Gateway Center, 420 Ft. Duquesne Blvd., Suite 1200, Pittsburgh, Pennsylvania 15222 (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, 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, 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,

(54) Title: METHOD, SYSTEM, AND COMPUTER PROGRAM PRODUCT FOR MODELLING AND GOVERNANCE FOR TRANSITIVE PRIVILEGED ACCESS

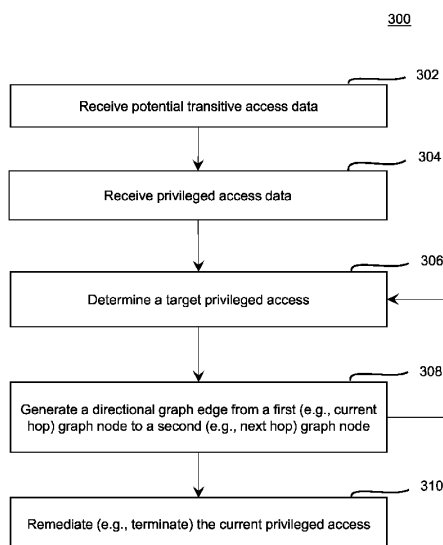


FIG. 3

(57) Abstract: Methods, systems, and computer program products for modelling and governance for transitive privileged access are provided. A method may include receiving potential transitive access data associated with at least one potential transitive access path, receiving privileged access data associated with a plurality of privileged accesses including a current privileged access, and determining a first target privileged access based on the current privileged access, the potential transitive access data, and the privileged access data. The method may also include generating a first directional graph edge from a first graph node associated with the current privileged access to a second graph node associated with the first target privileged access, the first directional graph edge representing a first transitive access path from the first graph node to the second graph node. The method may also include terminating the current privileged access based on the first transitive access path.

[Continued on next page]

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).

Declarations under Rule 4.17:

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

Published:

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

(88) Date of publication of the international search report:

02 January 2025 (02.01.2025)