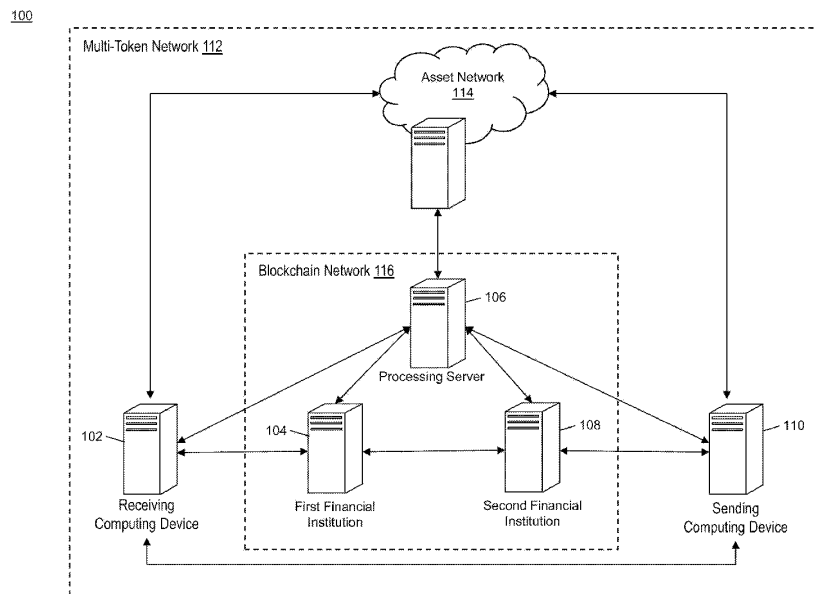




- (51) International Patent Classification:
G06Q 20/06 (2012.01) *G06Q 20/12* (2012.01)
- (21) International Application Number:
PCT/US2023/018483
- (22) International Filing Date:
13 April 2023 (13.04.2023)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
63/330,432 13 April 2022 (13.04.2022) US
63/424,242 10 November 2022 (10.11.2022) US
- (71) Applicant: **MASTERCARD INTERNATIONAL INCORPORATED** [US/US]; 2000 Purchase Street, Purchase, NY 10577 (US).
- (72) Inventors: **FERNANDES, Matthew, Sebastian Alfonso**; 31 Lucien Road, London SW17 8HS (GB). **DURIS, Oskar**; 2011 Julius Court, Walnut Creek, CA 94598 (US). **GOY-AL, Rashi**; 46 Elsie Drive, Plainsboro, NJ 08536 (US). **MAITY, Arnab**; 412 Rustay Court, South Plainfield, NJ 07080 (US). **ETHERIDGE, Martin**; 11 Fullers Avenue, Woodford Green IG8 9EB (GB).
- (74) Agent: **KLOCINSKI, Steven**; Mastercard International Incorporated, 2000 Purchase Street, Purchase, NY 10577 (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,

(54) Title: METHOD AND SYSTEM OF TRANSACTION SETTLEMENT AND SMART CONTRACT ACCESS USING GUARANTEE TOKENS



(57) Abstract: A method for transaction settlement using guarantee tokens includes: receiving a transaction request from a first financial institution including a receiving party digital address, a digital token issued by the first financial institution to the receiving party digital address, a sending party address, an asset network identification, and an asset identification; generating a guarantee token against the digital token; generating an asset request transaction including the guarantee token, the receiving party digital address, the sending party digital address, and the asset identification; transmitting the asset request transaction to the asset network; receiving an asset transaction from the asset network including the asset, the receiving party digital address, and the sending party digital address; generating an asset transfer transaction including the receiving party digital address, the sending party digital address, and the asset identification; and transmitting the asset transaction to the receiving party digital address.

[Continued on next page]

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,
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))*
