

(51) International Patent Classification:
G06Q 10/08 (2012.01)(21) International Application Number:
PCT/US2021/027448(22) International Filing Date:
15 April 2021 (15.04.2021)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
63/010,598 15 April 2020 (15.04.2020) US(71) Applicants: **EYGS LLP** [GB/GB]; 6 More London Place, London SE1 2 DA (GB). **ERNST & YOUNG U.S. LLP** [US/US]; 5 Times Square, New York, New York 10036 (US). **ERNST & YOUNG BELASTINGADVISEURS LLP** [NL/NL]; Cross Towers, Antonio Vivaldistrat 150, 1083 HP Amsterdam (NL).

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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,

(54) Title: INTELLIGENT ASSERTION TOKENS FOR AUTHENTICATING AND CONTROLLING NETWORK COMMUNICATIONS USING A DISTRIBUTED LEDGER

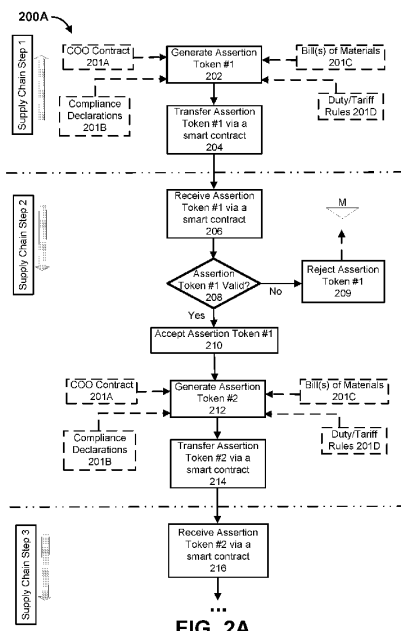


FIG. 2A

(57) Abstract: A method for generating and controlling intelligent assertion tokens includes generating a first assertion token, during a first step of a supply chain process. The first assertion token is inspected to determine validity. If the first assertion token is not valid, the receipt of the first assertion token is rejected. If the first assertion token is determined to be valid, the use of the first assertion token in further transmissions and/or transactions is authorized. The first assertion token can be passed to a second step of the supply chain process, and a second assertion token may be generated based on the first assertion token. Upon receipt of the second assertion token, it is inspected to determine validity. If not valid, the transmission and/or transfer of the second assertion token is rejected. If valid, the transmission and/or transfer of the second assertion token to a further step of the supply chain process or to a customer is authorized.

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).

Published:

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