

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
24 September 2020 (24.09.2020)



(10) International Publication Number
WO 2020/190934 A1

(51) International Patent Classification:
H04L 29/06 (2006.01) *H04W 4/14* (2009.01)

(21) International Application Number:
PCT/US2020/023134

(22) International Filing Date:
17 March 2020 (17.03.2020)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
16/357,266 18 March 2019 (18.03.2019) US

(71) Applicant: **CAPITAL ONE SERVICES, LLC** [US/US];
1680 Capital One Drive, McLean, Virginia 22102 (US).

(72) Inventors: **ILINCIC, Rajko**; c/o Capital One Services,
LLC, 1680 Capital One Drive, McLean, Virginia 22102

(US). **NEWMAN, Kaitlin**; c/o Capital One Services, LLC,
1680 Capital One Drive, McLean, Virginia 22102 (US).
RULE, Jeffrey; c/o Capital One Services, LLC, 1680 Capital One Drive, McLean, Virginia 22102 (US).

(74) Agent: **RUSSELL, Matthew S.** et al.; Kacvinsky Daisak
Blumi, PLLC, 2601 Weston Parkway, Suite 103, Cary, North
Carolina 27513 (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, 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, 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,

(54) Title: SYSTEM AND METHOD FOR SECOND FACTOR AUTHENTICATION OF CUSTOMER SUPPORT CALLS



WO 2020/190934 A1

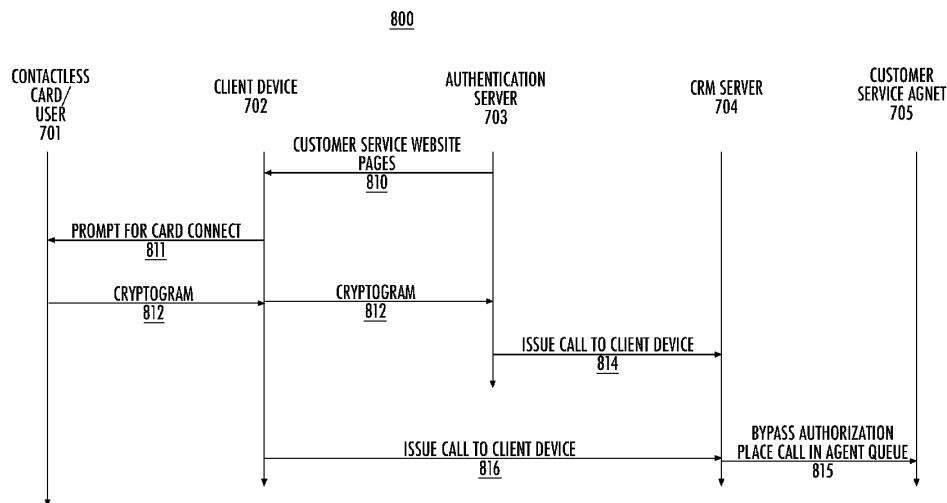


FIG. 8

(57) Abstract: A system and method are disclosed that leverage multi-factor authentication features of a service provider and intelligent call routing to increase security and efficiency at a customer call center. Pre-authentication of customer support requests reduces the potential for misappropriation of sensitive customer data during call handling. A contactless card uniquely associated with a client may provide a second factor of authentication via a backchannel to reduce the potential for malicious third-party impersonation of the client prior to transfer of the call to the customer call center. Pre-authorized customer support calls may be intelligently and efficiently routed directly to call center agents, without incurring further delay. During call handling, call center agents may initiate further client authentication processes, including contactless card authentication requests, over one or more different communication channels for authorizing access to sensitive information or to allay suspicion.

[Continued on next page]

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).

Published:

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