

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
26 August 2021 (26.08.2021)



(10) International Publication Number
WO 2021/168357 A1

(51) International Patent Classification:

H04L 29/06 (2006.01) H04W 12/71 (2021.01)
H04L 29/08 (2006.01) H04W 12/72 (2021.01)
H04W 12/06 (2021.01) H04W 12/75 (2021.01)
H04W 12/08 (2021.01)

(21) International Application Number:

PCT/US2021/018914

(22) International Filing Date:

19 February 2021 (19.02.2021)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

62/979,973 21 February 2020 (21.02.2020) US

(71) Applicant: **NOMADIX, INC.** [US/US]; 21600 Oxnard Street, Suite 1900, Woodland Hills, California 91367 (US).

(72) Inventor: **OLSHANSKY, Vadim**; c/o Nomadix, Inc., 21600 Oxnard Street, Suite 1900, Woodland Hills, California 91367 (US).

(74) Agent: **DELANEY, Karoline, A.**; KNOBBE, MARTENS, OLSON & BEAR, LLP, 2040 Main Street, 14th Floor, Irvine, California 92614 (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, 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, 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))

(54) Title: MANAGEMENT OF NETWORK INTERCEPT PORTALS FOR NETWORK DEVICES WITH DURABLE AND NON-DURABLE IDENTIFIERS

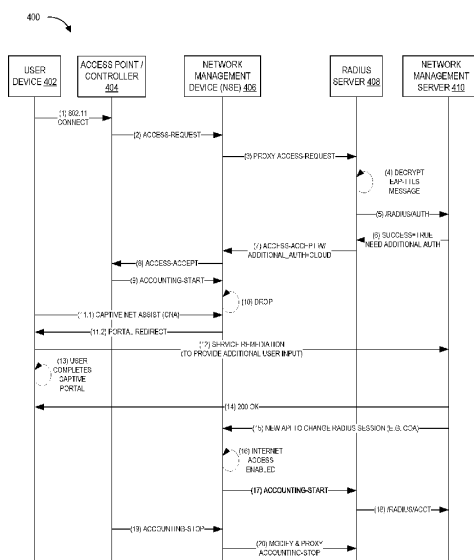


FIG. 4

(57) Abstract: Generally described, the presently disclosed technology utilizes durable and non-durable identifiers of a user device to authenticate the user device and cause the user device to be directed to a network intercept portal or captive portal to the user device based on whether additional user input is needed from the user device. A cloud network management server may identify a user device based on a previously stored association between a durable identifier associated with the user device and a non-durable identifier associated with the user device. In response to an indication from the cloud network management server that additional input is needed, a gateway or network management device can indicate to the access point that network access has been granted to the user device, but redirect the user device to network intercept portal or captive portal to obtain the additional user input requested by the cloud network management server.

WO 2021/168357 A1