

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
11 August 2022 (11.08.2022)



(10) International Publication Number
WO 2022/169809 A1

- (51) **International Patent Classification:**
H04W 12/121 (2021.01) *H04B 7/185* (2006.01)
- (21) **International Application Number:**
PCT/US2022/014860
- (22) **International Filing Date:**
02 February 2022 (02.02.2022)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
63/145,419 03 February 2021 (03.02.2021) US
- (71) **Applicant:** SC NETWORKS, INCORPORATED
[US/US]; 11111 Sunset Hills Road, Ste. 111, Reston, Virginia 20190 (US).
- (72) **Inventors:** DALTON, Dana; 11111 Sunset Hills Road, Ste. 111, Reston, Virginia 20190 (US). MOORE, Colby; 11111 Sunset Hills Road, Ste. 111, Reston, Virginia 20190 (US).
- (74) **Agent:** PATEL, Tayan et al.; BAKERHOSTETTLER, 1050 Connecticut Avenue, N.W., Suite 1100, Washington, District of Columbia 20036 (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:** SATELLITE COMMUNICATIONS NETWORK INTRUSION DETECTION SYSTEM AND METHOD

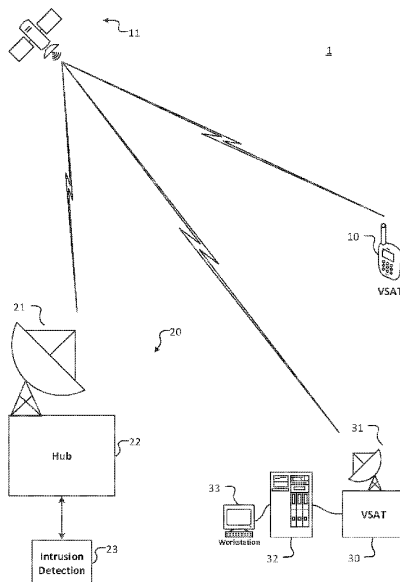


FIG. 1M

(57) **Abstract:** The present application at least describes an intrusion detection system. The system may include a non-transitory memory including a set of instructions. The system may also include a processor operably coupled to the non-transitory memory configured to execute the set of instructions. One of the instructions may include obtaining streaming metrics data from a satellite network management system, identifying a terminal in an intrusion detection database. Another one of the instructions may include determining, based on the streaming metrics data, whether a confidence score for the identified terminal meets or exceeds a predetermined threshold. Yet another one of the instructions may include generating an alert based upon the evaluation.

WO 2022/169809 A1