

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
16 January 2020 (16.01.2020)



(10) International Publication Number
WO 2020/014497 A1

(51) International Patent Classification:

H04B 7/185 (2006.01) H04W 40/16 (2009.01)
H04W 40/14 (2009.01) H04W 40/12 (2009.01)

(21) International Application Number:

PCT/US2019/041428

(22) International Filing Date:

11 July 2019 (11.07.2019)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

62/697,250 12 July 2018 (12.07.2018) US
62/739,245 30 September 2018 (30.09.2018) US

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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, 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, SM, ST, SV, SY, TH, TJ, TM, TN,
TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(54) Title: COMMUNICATIONS SYSTEMS AND METHODS WITH STOCHASTICALLY DISTRIBUTED ORBITING SATELLITES

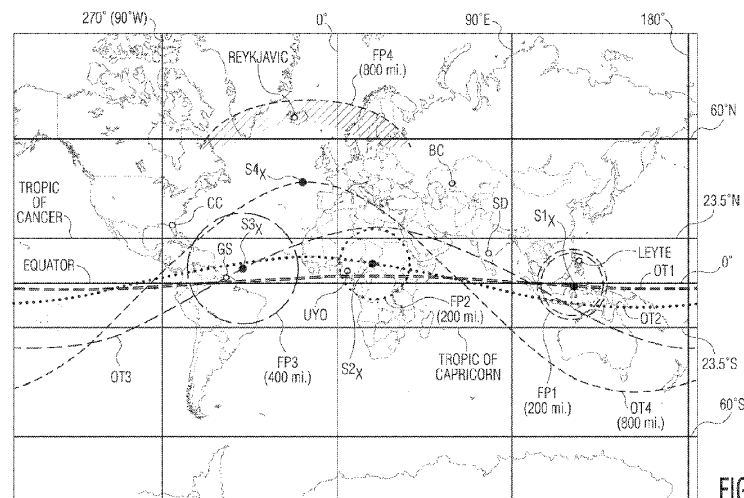


FIG. 5

(57) Abstract: A radio communication system for transmitting data to a ground station includes plural stochastically distributed orbiting satellites with plural antennas traversing a portion of the earth's surface divided into zones. The ground station has a unique address identifying itself and the zone where it is located. A local area network associated with the ground node includes at least one satellite that stores the identity of a satellite antenna paired with a ground station antenna to form a radio link for transmitting data onboard the satellite to the ground station. Other satellites in the local area network store the ground node address and the identity of an antenna paired with an antenna in another satellite that also has stored the ground node address. A wide area network includes at least one satellite, each of which stores the identity of an antenna paired with an antenna of another satellite that has stored the ground node zone to form at least one inter-satellite radio link. If a satellite with data onboard is not in a local area network associated with the destination

[Continued on next page]

(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))*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*