

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
02 January 2020 (02.01.2020)



(10) International Publication Number
WO 2020/002938 A1

(51) International Patent Classification:
H01Q 1/28 (2006.01) *H01Q 15/16* (2006.01)

(21) International Application Number:
PCT/GB2019/051837

(22) International Filing Date:
28 June 2019 (28.06.2019)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
1810642.7 28 June 2018 (28.06.2018) GB

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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.

(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).

(54) Title: DEPLOYABLE MEMBRANE STRUCTURE FOR AN ANTENNA

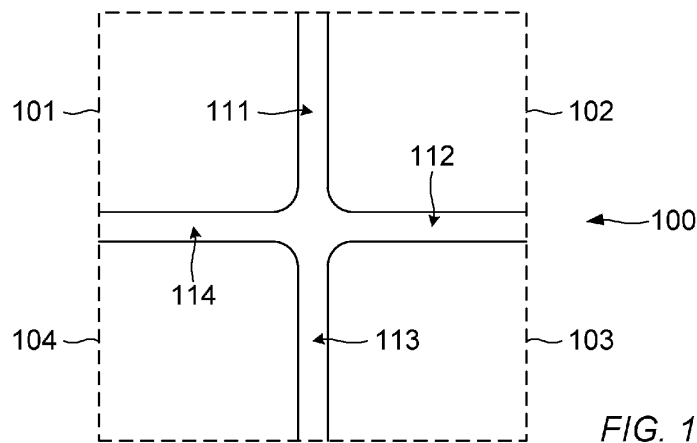


FIG. 1

(57) Abstract: A deployable membrane structure for an antenna comprises a membrane comprising a plurality of first regions of higher-stiffness material integrally connected via one or more second regions of lower-stiffness material, wherein the one or more second regions are formed from compliant material configured to permit the membrane to be folded into a collapsed configuration and subsequently unfolded into a deployed configuration, and are arranged so as to allow adjacent ones of the plurality of first regions to be folded so as to lie against one another. In some embodiments the membrane is formed of a composite material comprising a plurality of fibres in a compliant matrix, and the plurality of first regions comprise material with a higher fibre density than the one or more second regions. A deployable antenna comprising the deployable membrane structure is also disclosed.

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Published:

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