Title (en)

ANTENNA DEVICE INCLUDING PARABOLIC-HYPERBOLIC REFLECTOR

Title (de)

ANTENNENVORRICHTUNG MIT PARABOLISCH HYPERBOLISCHEM REFLEKTOR

Title (fr)

DISPOSITIF D'ANTENNE COMPRENANT UN RÉFLECTEUR PARABOLIQUE-HYPERBOLIQUE

Publication

EP 3516738 A1 20190731 (EN)

Application

EP 17868835 A 20170713

Priority

- RU 2016143930 A 20161109
- KR 20170068514 A 20170601
- KR 2017007527 W 20170713

Abstract (en)

[origin: RU2629906C1] FIELD: radio engineering, communication.SUBSTANCE: antenna comprises a reflector which has a profile of parabolic shape in the first section and a profile of hyperbolic shape in the second section, wherein the second section is orthogonal to the first section; and an irradiation structure comprising at least one phased antenna array configured to irradiate at least a portion of the reflector and scan the beam. Moreover, the edges of the parabolic reflector envelope are directed toward the irradiation structure, and the edges of the hyperbolic reflector envelope are directed outward from the irradiation structure.EFFECT: increased scanning angle of the antenna in one plane while providing the possibility of forming the required directional diagram in another plane without increasing the dimensions, without degrading the efficiency and without increasing the level of the side lobes.11 cl, 10 dwg

IPC 8 full level

H01Q 15/16 (2006.01); **H01Q 21/00** (2006.01)

CPC (source: EP KR RU US)

H01Q 1/246 (2013.01 - EP US); **H01Q 3/30** (2013.01 - EP); **H01Q 9/00** (2013.01 - RU); **H01Q 15/16** (2013.01 - EP KR US); **H01Q 19/17** (2013.01 - EP); **H01Q 21/005** (2013.01 - KR)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3516738 A1 20190731; EP 3516738 A4 20191106; EP 3516738 B1 20201104; KR 102274497 B1 20210709; KR 20180052071 A 20180517; RU 2629906 C1 20170904

DOCDB simple family (application)

EP 17868835 A 20170713; KR 20170068514 A 20170601; RU 2016143930 A 20161109