

Title (en)

TWO DIMENSIONAL MULTIBEAM FORMER, ANTENNA USING SUCH AND SATELLITE TELECOMMUNICATION SYSTEM.

Title (de)

ZWEIDIMENSIONALER MEHRSTRAHLFORMER, ANTENNE MIT EINEM SOLCHEN MEHRSTRAHLFORMER UND SATELLITENTELEKOMMUNIKATIONSSYSTEM MIT EINER DERARTIGEN ANTENNE

Title (fr)

FORMATEUR MULTI-FAISCEAUX À DEUX DIMENSIONS, ANTENNE COMPORTANT UN TEL FORMATEUR MULTI-FAISCEAUX ET SYSTÈME DE TÉLÉCOMMUNICATION PAR SATELLITE COMPORTANT UNE TELLE ANTENNE

Publication

**EP 2807702 A1 20141203 (FR)**

Application

**EP 13701118 A 20130125**

Priority

- FR 1200244 A 20120127
- EP 2013051509 W 20130125

Abstract (en)

[origin: WO2013110793A1] The multi-beam former comprises: two stages connected together and intended for synthesizing beams focused in two directions in space, each stage comprises at least two multi-layer plane structures (P11, P1Ny), (P21, P2Mx), superposed one above the other, each multi-layer structure (P11, P1Ny, P21, P2Mx) comprises an internal reflector, at least two first internal sources disposed in front of the internal reflector and linked to two input/output ports (27, 26) aligned along an axis (V, V'), at least two second internal sources disposed in a focal plane of the internal reflector and linked to two second input/output ports (25, 28) aligned along an axis (U, U') perpendicular to the axis (V, V'), the two second internal sources of the same multi-layer structure (P11) of the first stage are respectively linked to two first internal sources of two different multi-layer structures (P21), (P2Mx) of the second stage.

IPC 8 full level

**H01Q 21/00** (2006.01); **H01Q 1/28** (2006.01); **H01Q 3/26** (2006.01); **H01Q 19/13** (2006.01); **H01Q 19/18** (2006.01)

CPC (source: EP US)

**H01Q 3/26** (2013.01 - US); **H01Q 3/2664** (2013.01 - EP US); **H01Q 13/02** (2013.01 - US); **H01Q 19/138** (2013.01 - EP US); **H01Q 19/18** (2013.01 - US); **H01Q 21/00** (2013.01 - US); **H01Q 21/0031** (2013.01 - EP US); **H01Q 25/00** (2013.01 - US)

Citation (search report)

See references of WO 2013110793A1

Cited by

US2022276330A1; US11664594B2; US2023187828A1; US11824280B2; US11862871B2; US11670855B2; US11695209B2; US11721900B2; US11742578B2; US11742579B2; US11777215B2; US11784412B2; US11791557B2; US11817636B2; US11824279B2; US11843188B2; US11870159B2; US11955727B2; US11996634B2; US12009606B2

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

DOCDB simple family (publication)

**WO 2013110793 A1 20130801**; CA 2862729 A1 20130801; CA 2862729 C 20200721; EP 2807702 A1 20141203; EP 2807702 B1 20170405; ES 2628633 T3 20170803; FR 2986377 A1 20130802; FR 2986377 B1 20140328; JP 2015505229 A 20150216; JP 6127067 B2 20170510; US 2014354499 A1 20141204; US 9627779 B2 20170418

DOCDB simple family (application)

**EP 2013051509 W 20130125**; CA 2862729 A 20130125; EP 13701118 A 20130125; ES 13701118 T 20130125; FR 1200244 A 20120127; JP 2014553741 A 20130125; US 201314374855 A 20130125