

Title (en)  
MECHANICAL ARCHITECTURE OF A BEAM FORMER FOR SINGLE-REFLECTOR MFPB ANTENNA WITH SHARING OF SOURCES IN TWO SPATIAL DIMENSIONS, AND PROCESS FOR PRODUCING THE BEAM FORMER

Title (de)  
MECHANISCHER AUFBAU EINES STRAHLFORMERS FÜR MFPB-ANTENNE MIT EINEM REFLEKTOR MIT ZWEIDIMENSIONALER QUELLENAUFTEILUNG, UND HERSTELLUNGSVERFAHREN DIESES STRAHLFORMERS

Title (fr)  
ARCHITECTURE MÉCANIQUE D'UN FORMATEUR DE FAISCEAUX POUR ANTENNE MFPB MONO-RÉFLECTEUR À PARTAGE DE SOURCES SELON DEUX DIMENSIONS DE L'ESPACE ET PROCÉDÉ DE RÉALISATION DU FORMATEUR DE FAISCEAUX

Publication  
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Application  
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Priority  
FR 1601834 A 20161222

Abstract (en)  
[origin: CA2989855A1] The mechanical architecture of the beam former comprises a plurality of elementary combination circuits (11) and a support structure (10), the elementary combination circuits (11) being independent of one another, each elementary combination circuit being intended to form a beam, the support structure (10) comprising two metal interface plates (13, 14), respectively top and bottom, the two interface plates being formed parallel to one another and spaced apart from one another, in a heightwise direction Z orthogonal to the two interface plates, the elementary combination circuits (11) being mounted in the space between the two interface plates (13, 14) and fixed at right angles to the two interface plates.

Abstract (fr)  
L'architecture mécanique du formateur de faisceaux comporte une pluralité de circuits de combinaison élémentaires (11) et une structure de support (10), les circuits de combinaison élémentaires (11) étant indépendants les uns des autres, chaque circuit de combinaison élémentaire étant destiné à la formation d'un faisceau, la structure de support (10) comportant deux plaques métalliques d'interface (13, 14), respectivement supérieure et inférieure, les deux plaques d'interface étant aménagées parallèlement entre elles et espacées l'une de l'autre, selon une direction de hauteur Z orthogonale aux deux plaques d'interface, les circuits de combinaison élémentaires (11) étant montés dans l'espace entre les deux plaques d'interface (13, 14) et fixés perpendiculairement aux deux plaques d'interface.

IPC 8 full level  
**H01Q 19/17** (2006.01); **H01P 5/12** (2006.01); **H01P 5/19** (2006.01); **H01Q 1/28** (2006.01); **H01Q 3/40** (2006.01); **H01Q 21/00** (2006.01); **H01Q 25/00** (2006.01); **H01Q 21/06** (2006.01)

CPC (source: EP US)  
**H01P 1/042** (2013.01 - EP US); **H01P 5/024** (2013.01 - EP US); **H01P 11/002** (2013.01 - US); **H01Q 19/17** (2013.01 - EP US); **H01Q 21/0025** (2013.01 - EP US); **H01Q 21/064** (2013.01 - EP US); **H01Q 25/007** (2013.01 - EP US); **H01P 5/19** (2013.01 - EP US); **H01Q 1/288** (2013.01 - EP US); **H01Q 21/24** (2013.01 - EP US)

Citation (search report)  
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• [A] EP 2930790 A1 20151014 - THINKOM SOLUTIONS INC [US]  
• [A] LAI QINGHUA ET AL: "A prototype of feed subsystem for a multiple-beam array-fed reflector antenna", 2015 IEEE INTERNATIONAL SYMPOSIUM ON ANTENNAS AND PROPAGATION & USNC/URSI NATIONAL RADIO SCIENCE MEETING, IEEE, 19 July 2015 (2015-07-19), pages 238 - 239, XP032796220, DOI: 10.1109/APS.2015.7304505  
• [A] ZHANG BING ET AL: "Metallic 3-D Printed Rectangular Waveguides for Millimeter-Wave Applications", IEEE TRANSACTIONS ON COMPONENTS, PACKAGING AND MANUFACTURING TECHNOLOGY, IEEE, USA, vol. 6, no. 5, 1 May 2016 (2016-05-01), pages 796 - 804, XP011610475, ISSN: 2156-3950, [retrieved on 20160517], DOI: 10.1109/TCPMT.2016.2550483

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