

Title (en)

Slotted waveguides antenna, in particular for space radar.

Title (de)

Antenne mit geschlitzten Hohlleitern, insbesondere für Weltraumradar.

Title (fr)

Antenne en guides d'ondes à fentes, notamment pour radars spatiaux.

Publication

EP 0440126 A1 19910807 (FR)

Application

EP 91101053 A 19910128

Priority

FR 9000990 A 19900129

Abstract (en)

The invention relates to a slotted waveguides dual-polarised antenna, in particular for space radars, comprising rectangular waveguides arranged in parallel along a common wall (10), two neighbouring guides (11, 15) being separated from one another by a same wall (22, 23), the last wall (12, 17) of each guide, situated opposite the common wall (10), being provided with radiating slots (13, 16); this antenna comprising alternately waveguides of a first type (11) radiating a first polarisation and waveguides of a second type (15) radiating a second polarisation. Application in particular to the field of space telecommunications or radars. <IMAGE>

Abstract (fr)

L'invention concerne une antenne bipolarisée en guides d'ondes à fentes, notamment pour radars spatiaux, comprenant des guides d'ondes rectangulaires disposés parallèlement le long d'une paroi commune (10), deux guides voisins (11, 15) étant séparés entre eux par une même paroi (22, 23), la dernière paroi (12, 17) de chaque guide, située à l'opposé de la paroi commune (10), étant munie de fentes rayonnante (13, 16) ; cette antenne comprenant alternativement des guides d'onde d'un premier type (11) rayonnant une première polarisation et des guides d'onde d'un second type (15) rayonnant une seconde polarisation. Application notamment au domaine des radars ou télécommunications spatiales. <IMAGE>

IPC 1-7

H01Q 13/10; **H01Q 21/00**; **H01Q 21/24**

IPC 8 full level

H01Q 13/10 (2006.01); **H01Q 13/22** (2006.01); **H01Q 21/00** (2006.01); **H01Q 21/08** (2006.01); **H01Q 21/24** (2006.01)

CPC (source: EP)

H01Q 13/10 (2013.01); **H01Q 21/005** (2013.01); **H01Q 21/24** (2013.01)

Citation (search report)

- [Y] FR 2455804 A1 19801128 - INT STANDARD ELECTRIC CORP [US]
- [Y] US 3524189 A 19700811 - JONES HOWARD S JR
- [A] GB 997773 A 19650707 - HUGHES AIRCRAFT CO
- [A] IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION. vol. 36, no. 11, novembre 1988, NEW YORK US pages 1531 - 1544; 11M et al.: "A Design Procedure for Slot Arrays Fed by Single-Ridge Waveguide"
- [A] Conference Proceedings Military Microwaves `86 juin 1986, Brighton/England pages 231 - 236; Wagner: "CARBON FIBRE SLOTTED WAVEGUIDE ARRAYS"

Cited by

EP4197064A4; US5831583A; NL9402195A; CN1094666C; BE1005991A3; US6114956A; GB2376346A; GB2376346B; US2012007771A1; EP0747994A3; US8446313B2; US11611148B2; US6542130B2; US6509881B2; EP0768541A2; WO0165641A1; WO9620515A1; WO0205386A1; WO9400777A1; WO9515592A1; US10854991B2; EP3301750B1

Designated contracting state (EPC)

DE FR GB IT SE

DOCDB simple family (publication)

EP 0440126 A1 19910807; CA 2035111 A1 19910730; FR 2657729 A1 19910802; FR 2657729 B1 19920612; JP H04213202 A 19920804

DOCDB simple family (application)

EP 91101053 A 19910128; CA 2035111 A 19910128; FR 9000990 A 19900129; JP 2277391 A 19910123