

Title (en)

High-frequency dual-band feeder and antenna incorporating the same.

Title (de)

Hochfrequenz-Doppelbanderreger und eine Antenne mit einem solchen Erreger.

Title (fr)

Source hyperfréquence bi-bande et antenne comportant une telle source.

Publication

EP 0057121 A2 19820804 (FR)

Application

EP 82400050 A 19820112

Priority

FR 8101286 A 19810123

Abstract (en)

[origin: CA1176368A] A TWO-BAND MICROWAVE SOURCE AND AN ANTENNA EQUIPPED WITH SAID SOURCE A wide-band multimode microwave source for low-elevation tracking radar antennas consists of two independent multimode sources each capable of operating within a low-frequency band or a high-frequency band and mechanically coupled together by constructing the highfrequency-band source within the interior of an obstacle constituting the E-plane moder of the low-frequency-band source in order to ensure that the planes of polarization of the two sources are at right angles to each other. A lens which is transparent in the low-frequency band extends the Rayleigh zone of the high-frequency-band source to the interior of the Fraunhofer zone of the low-frequency-band source.

Abstract (fr)

Source hyperfréquence à large bande, multi-mode, susceptible de fonctionner dans deux bandes de fréquences différentes. Deux sources multi-mode indépendantes opérant chacune dans l'une des bandes de fréquence (I - S) sont mécaniquement couplées en réalisant la source en bande élevée à l'intérieur de l'obstacle (17l) constituant le modeur plan E de la source en bande basse, de façon que les plans de polarisation des deux sources soient orthogonaux; une lentille transparente (21) en bande basse prolonge la zone de Rayleigh de la source en bande haute jusqu'à l'intérieur de la zone de Fraunhofer de la source en bande basse. Antennes de radar de poursuite à site bas.

IPC 1-7

H01Q 5/00; H01Q 25/04

IPC 8 full level

H01Q 13/02 (2006.01); **H01Q 5/00** (2006.01); **H01Q 19/08** (2006.01); **H01Q 19/10** (2006.01); **H01Q 25/04** (2006.01)

CPC (source: EP US)

H01Q 5/45 (2015.01 - EP US); **H01Q 25/04** (2013.01 - EP US)

Cited by

US4740795A; EP0148136A1; EP0130111A1; FR2547956A1

Designated contracting state (EPC)

AT BE CH DE GB IT LI NL SE

DOCDB simple family (publication)

EP 0057121 A2 19820804; EP 0057121 A3 19820811; EP 0057121 B1 19870415; AT E26628 T1 19870515; CA 1176368 A 19841016; DE 3276092 D1 19870521; DK 21482 A 19820724; FR 2498820 A1 19820730; FR 2498820 B1 19850104; JP S57142005 A 19820902; US 4489331 A 19841218

DOCDB simple family (application)

EP 82400050 A 19820112; AT 82400050 T 19820112; CA 394580 A 19820121; DE 3276092 T 19820112; DK 21482 A 19820119; FR 8101286 A 19810123; JP 873382 A 19820122; US 34158082 A 19820121