

Title (en)

Device which improves the efficiency of a radiating system by means of parasite elements set on the ground plane.

Title (de)

Vorrichtung zur Verbesserung des Wirkungsgrades eines Strahlungssystems durch parasitäre Elemente in der Massefläche.

Title (fr)

Dispositif pour améliorer l'efficacité d'un système rayonnant par éléments parasites dans le plan de masse.

Publication

EP 0521326 A2 19930107 (EN)

Application

EP 92109983 A 19920613

Priority

IT RM910429 A 19910614

Abstract (en)

The device consist of half-wavelength dipoles (active elements) (1) and four indirectly fed slots (6) (parasite elements), where these slots are excited by the active elements, which are connected to a supply line (4). The scope of the device is to control the radiating pattern of a dipole array through the slots (6). The invention pertains to the field of antennae, and more precisely to that of microwave antennae. It may be adopted in stand-alone or in integrated applications on reflector antennae for air traffic control, where detection is performed in the S band, associated with an interrogation performed in L band, obtained by inserting the innovative device into an existing feed so as to achieve a control over the radiating pattern of the entire radiating system or antenna, according to the application. <IMAGE>

IPC 1-7

G01B 1/00; H01Q 21/29

IPC 8 full level

H01Q 21/29 (2006.01)

CPC (source: EP)

H01Q 21/293 (2013.01)

Cited by

FR2779022A1; KR100454102B1; EP1174946A1; EP0856909A1; US5872544A; US6448937B1; US6501965B1; WO2008151451A1; WO9960657A1

Designated contracting state (EPC)

DE ES FR GB NL SE

DOCDB simple family (publication)

EP 0521326 A2 19930107; EP 0521326 A3 19930317; CA 2071253 A1 19921215; IT 1246619 B 19941124; IT RM910429 A0 19910614; IT RM910429 A1 19921214

DOCDB simple family (application)

EP 92109983 A 19920613; CA 2071253 A 19920615; IT RM910429 A 19910614