

Title (en)
FLAT MICROWAVE ANTENNA STRUCTURE

Publication
EP 0089084 B1 19880302 (FR)

Application
EP 83200333 A 19830310

Priority
FR 8204252 A 19820312

Abstract (en)
[origin: US4527165A] An antenna for circularly polarized high-frequency signals comprising a succession of layers. An insulating layer 10 includes openings defined by metal plated walls forming miniature horns, each having a square cross-section. A dielectric layer 19 adjacent layer 10 supports a first supply network 20 for signals whose direction of polarization is of a first type of linear polarization. An insulating layer 30 adjacent layer 19 includes openings defined by metal plated walls forming miniature waveguides each having the same square cross-section as a respective horn, at the side facing the first network 20, and having a rectangular cross-section at the other side. A dielectric layer 39 adjacent layer 30 supports a second supply network 40 for signals whose direction of polarization is perpendicular to the polarization of the signals of the first network. An insulating layer 50 adjacent layer 39 includes openings defined by metal plated walls forming miniature waveguides each having the same rectangular cross-section as a respective waveguide in layer 30, at the side facing the second network, and which has a depth smaller than the thickness of the layer 50.

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IPC 8 full level
H01Q 13/02 (2006.01); **H01Q 21/00** (2006.01); **H01Q 21/06** (2006.01); **H01Q 21/24** (2006.01)

CPC (source: EP US)
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EP0317414A1; EP0215240A3; FR2609577A2; EP0228743A1; FR2592233A1; FR2599899A1; EP0200819A3; US5426441A; FR2623336A2; EP0228742A1; FR2592232A1; GB2323970A; GB2323970B; GB2301486A; GB2301486B; EP0325034A3; DE3917138A1; FR2632781A1; EP0239069A1; FR2596585A1; US4819004A; GB2247990A; EP0252779A1; EP0174250A1; FR2569907A1; US4695844A; CN102709689A; US11196178B2; WO9529519A1; WO8909501A1; WO9523440A1; WO9120108A1; WO2007046055A3; WO9216982A1

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