

Title (en)
FLAT ANTENNA.

Title (de)
Flächenantenne.

Title (fr)
ANTENNE PLATE.

Publication
EP 0489934 B1 19950215 (DE)

Application
EP 91921023 A 19910613

Priority
• SU 9100117 W 19910613
• SU 4857338 A 19900619

Abstract (en)
[origin: WO9120108A1] A flat antenna has a multilayer structure consisting of a screening layer (1) of an electroconductive material, a layer (2) with a strip-type power supply and a radiation layer (4) consisting of a plate with slot-type radiators (5, 6) electro-magnetically connected to the corresponding strips (3) of the power supply circuit, all the layers being mutually separated by means of dielectric spacers (7, 8). The antenna contains a grid (9) of three-dimensional cells (10) and carries a layer (11) partially transparent to the frequency band of the received waves. The surface of the grid (9) is made of an electroconductive material and the grid (9) is located on the plate with the radiation layer so as to form, by means of each of its cells (10), a three-dimensional resonator in which is located at least one slot-type radiator (5 or 6). The length and the width of each cell (10) exceed the average wave length (\$g(l)\$), and its height differs from half the average wave length (\$g(l)\$) by a value of approximately 0.02-0.07 of the wave length (\$g(l)\$). The antenna comprises also an adapter (14) connected to the screening layer (1) and to the strips (3) of the power supply.

IPC 1-7
H01Q 13/18

IPC 8 full level
H01Q 13/18 (2006.01); **H01Q 21/06** (2006.01)

CPC (source: EP)
H01Q 13/18 (2013.01); **H01Q 21/064** (2013.01)

Cited by
EP1199772A3; EP1608037A1; US7038624B2

Designated contracting state (EPC)
DE FR GB

DOCDB simple family (publication)
WO 9120108 A1 19911226; DE 59104606 D1 19950323; EP 0489934 A1 19920617; EP 0489934 A4 19920812; EP 0489934 B1 19950215; RU 2016444 C1 19940715

DOCDB simple family (application)
SU 9100117 W 19910613; DE 59104606 T 19910613; EP 91921023 A 19910613; SU 4857338 A 19900619