

Title (en)

RADIATING ELEMENT FOR CROSS-POLARIZED MICROWAVE SIGNALS AND PLANAR ANTENNA CONSISTING OF AN ARRAY OF SUCH ELEMENTS

Publication

EP 0108463 B1 19871028 (FR)

Application

EP 83201588 A 19831105

Priority

- FR 8218700 A 19821108
- FR 8307109 A 19830429

Abstract (en)

[origin: CA1211837A] PHF 82 601 13 1-11-1983 "Radiating or receiving element for orthogonally polarized high-frequency signals and planar antenna comprising an array of juxtaposed elements of this type." A radiating or receiving element for orthogonally polarized high-frequency signals comprises, on both sides of a first layer having a first cavity, first and second perpendicular high-frequency transmission lines, and at the other side of the transmission lines a second layer having a second cavity and a third layer having a third cavity facing the other two cavities but short-circuited so as to form a reflecting plane, the transmission lines being constituted by symmetrical slots and conducting strips, which are provided in the median plane of these lines and whose ends project into the cavities to form exciting probes whose lengths are different and chosen such that for any predetermined thickness of the first layer, the pairs of values: lengths of the end of a probe/ distance of the probe to the sole reflecting plane correspond to an experimentally maximum or nearly maximum coupling between each of the probes and the propagation medium.

IPC 1-7

H01Q 21/24; **H01Q 1/38**

IPC 8 full level

H01Q 1/38 (2006.01); **H01Q 13/18** (2006.01); **H01Q 21/00** (2006.01); **H01Q 21/06** (2006.01); **H01Q 21/24** (2006.01)

CPC (source: EP US)

H01Q 1/38 (2013.01 - EP US); **H01Q 13/18** (2013.01 - EP US); **H01Q 21/0081** (2013.01 - EP US); **H01Q 21/064** (2013.01 - EP US); **H01Q 21/24** (2013.01 - EP US)

Citation (examination)

ELECTRONICS LETTERS, vol. 18, no. 6, 18 mars 1982, Londres, GB; E.RAMMOS: "New wideband high-gain stripline planar array for 12 GHz satellite TV", pages 252-253

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Designated contracting state (EPC)

DE FR GB IT SE

DOCDB simple family (publication)

EP 0108463 A1 19840516; **EP 0108463 B1 19871028**; AU 2107283 A 19840517; AU 573137 B2 19880526; CA 1211837 A 19860923; DE 3374250 D1 19871203; US 4626865 A 19861202

DOCDB simple family (application)

EP 83201588 A 19831105; AU 2107283 A 19831108; CA 440697 A 19831108; DE 3374250 T 19831105; US 54826383 A 19831103