

Title (en)

Planar radiating element with dual polarisation and network antenna comprising such a radiating element

Title (de)

Dual polarisiertes, planares Strahlungselement und mit einem solchen Strahlungselement ausgestattete Netzantenne

Title (fr)

Élément rayonnant plane à polarisation duale et antenne réseau comportant un tel élément rayonnant

Publication

**EP 2202846 B1 20111228 (FR)**

Application

**EP 09170166 A 20090914**

Priority

FR 0807401 A 20081223

Abstract (en)

[origin: EP2202846A1] The element (39) has a square shaped external metal annular grid (38) in which a metal patch (15) is concentric. A cavity (41) separates the grid and the patch, where the grid and the patch have a polygonal shape delimited by 4 pair wise opposite sides, and 2 orthogonal directions of polarization associated with 2 orthogonal electric fields (Eh, Ev). One of the directions of polarization is provided parallel to sides of the shape, where sides (42-45) of the patch parallel to the directions of polarization is electrically linked to a zone of the external grid when one of the fields is minimum. The polygonal shape of the metal patch is chosen a square, rectangle, cross or hexagon.

IPC 8 full level

**H01Q 9/04** (2006.01)

CPC (source: EP US)

**H01Q 9/0464** (2013.01 - EP US); **H01Q 9/0478** (2013.01 - EP US)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)

**EP 2202846 A1 20100630; EP 2202846 B1 20111228**; AT E539464 T1 20120115; CA 2687161 A1 20100623; CA 2687161 C 20160510; CN 101764283 A 20100630; ES 2377784 T3 20120330; FR 2940532 A1 20100625; FR 2940532 B1 20110415; JP 2010154530 A 20100708; KR 101640604 B1 20160718; KR 20100074053 A 20100701; RU 2009134902 A 20110327; RU 2490759 C2 20130820; US 2010156725 A1 20100624; US 8248306 B2 20120821

DOCDB simple family (application)

**EP 09170166 A 20090914**; AT 09170166 T 20090914; CA 2687161 A 20091202; CN 200910260640 A 20091218; ES 09170166 T 20090914; FR 0807401 A 20081223; JP 2009287956 A 20091218; KR 20090128859 A 20091222; RU 2009134902 A 20090917; US 57883109 A 20091014