

Title (en)

MULTILAYER PILLBOX ANTENNA HAVING PARALLEL PLANES, AND CORRESPONDING ANTENNA SYSTEM

Title (de)

MEHRSCICHTIGE PILLBOX-ANTENNE MIT PARALLELEN EBENEN UND ENTSPRECHENDES ANTENNENSYSTEM

Title (fr)

ANTENNE MULTICOUCHE A PLANS PARALLELES, DE TYPE PILLBOX, ET SYSTEME D'ANTENNE CORRESPONDANT

Publication

**EP 2415120 B1 20190306 (FR)**

Application

**EP 10711224 A 20100329**

Priority

- EP 2010054060 W 20100329
- FR 0952158 A 20090402

Abstract (en)

[origin: WO2010112443A1] The invention relates to a multilayer antenna (30) including a power supply portion generating a wave, a radiating portion, and a guide portion that makes it possible to guide the wave from the power supply portion to the radiating portion. The guide portion includes: at least two stacked guide layers having parallel planes and, for each pair of adjacent layers, means for transitioning between the adjacent layers, including a reflector (R1) engaging with a slot-coupling means. For at least one pair of adjacent layers, for which the guide portion includes a non-planar reflector, the slot-coupling means includes a plurality of slots (10). Each slot includes a main body that is elongate along at least one axis. The slots are placed on at least one row and together form a pattern that extends along the reflector and has a shape that is dependent on the shape of the reflector.

IPC 8 full level

**H01Q 19/13** (2006.01); **H01Q 3/18** (2006.01); **H01Q 13/22** (2006.01); **H01Q 19/17** (2006.01); **H01Q 21/00** (2006.01); **H01Q 21/06** (2006.01)

CPC (source: EP US)

**H01Q 3/18** (2013.01 - EP US); **H01Q 13/22** (2013.01 - EP US); **H01Q 19/138** (2013.01 - EP US); **H01Q 19/17** (2013.01 - EP US); **H01Q 21/005** (2013.01 - EP US); **H01Q 21/064** (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)

**WO 2010112443 A1 20101007**; EP 2415120 A1 20120208; EP 2415120 B1 20190306; FR 2944153 A1 20101008; FR 2944153 B1 20130419; JP 2012523149 A 20120927; JP 5913092 B2 20160427; US 2012092224 A1 20120419; US 9246232 B2 20160126

DOCDB simple family (application)

**EP 2010054060 W 20100329**; EP 10711224 A 20100329; FR 0952158 A 20090402; JP 2012502610 A 20100329; US 201013262765 A 20100329