

Title (en)

ANTENNA APPARATUS FOR TRANSMITTING AND RECEIVING ELECTROMAGNETIC SIGNALS

Title (de)

ANTENNENVORRICHTUNG ZUM SENDEN UND EMPFANGEN VON ELEKTROMAGNETISCHEN SIGNALEN

Title (fr)

DISPOSITIF D'ANTENNE POUR ÉMETTRE ET RECEVOIR DES SIGNAUX ÉLECTROMAGNÉTIQUES

Publication

**EP 2135324 A1 20091223 (DE)**

Application

**EP 08707217 A 20080123**

Priority

- EP 2008000504 W 20080123
- DE 102007004612 A 20070130

Abstract (en)

[origin: WO2008092592A1] An antenna apparatus (100) for transmitting and receiving electromagnetic signals. The antenna apparatus (100) comprises a ground plane (110) and an antenna element (120), which is arranged at an antenna-element spacing (150) above the ground plane (110). In addition, the antenna apparatus (100) comprises a plurality of parasitic elements (130), which are arranged on the ground plane (110) radially symmetrically around the antenna element (120), wherein the parasitic elements (130) are electrically connected to the ground plane (110).

IPC 8 full level

**H01Q 9/04** (2006.01)

CPC (source: EP US)

**H01Q 9/0407** (2013.01 - EP US); **H01Q 9/045** (2013.01 - EP US); **Y10T 29/49016** (2015.01 - US)

Citation (search report)

See references of WO 2008092592A1

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 MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)

**DE 102007004612 A1 20080807**; **DE 102007004612 B4 20130411**; EP 2135324 A1 20091223; EP 2135324 B1 20140312; US 2011050529 A1 20110303; US 8624792 B2 20140107; WO 2008092592 A1 20080807

DOCDB simple family (application)

**DE 102007004612 A 20070130**; EP 08707217 A 20080123; EP 2008000504 W 20080123; US 52493708 A 20080123