

Title (en)

Antenna module, in particular as a central transmission and/or receiver module for a vehicle, with several antennas and several transmission and receiver devices

Title (de)

Antennenmodul, insbesondere als zentrales Sende- und/oder Empfangsmodul für ein Fahrzeug, mit mehreren Antennen und mehreren Sende- und/oder Empfangseinrichtungen

Title (fr)

Module d'antennes, en particulier en tant que module d'émission et/ou réception central pour un véhicule, doté de plusieurs antennes et de plusieurs dispositifs d'émission et/ou de réception

Publication

**EP 1903632 B1 20110126 (DE)**

Application

**EP 07010729 A 20070530**

Priority

DE 102006025176 A 20060530

Abstract (en)

[origin: EP1863119A1] The aerial module has an upper and a lower part (1) with multiple aerals (13). The aerals are separated through an area of a carriage body of a vehicle. The upper and the lower part are mechanically connected with one another, by the area of the carriage body. The upper and lower parts, arranged at the inner and outer sides of the carriage body, overlap one another. A fixing means guide through small break-through of few millimeters through the carriage body in the area of the overlapping.

IPC 8 full level

**H01Q 1/08** (2006.01); **H01Q 1/12** (2006.01); **H01Q 1/32** (2006.01); **H01Q 1/42** (2006.01); **H01Q 21/28** (2006.01); **H01Q 23/00** (2006.01)

CPC (source: EP US)

**H01Q 1/088** (2013.01 - EP US); **H01Q 1/1214** (2013.01 - EP US); **H01Q 1/3208** (2013.01 - US); **H01Q 1/3275** (2013.01 - EP US); **H01Q 1/3291** (2013.01 - US); **H01Q 1/42** (2013.01 - EP US); **H01Q 21/28** (2013.01 - EP US); **H01Q 23/00** (2013.01 - EP US)

Cited by

DE102013224514A1; DE102011016294A1; DE102012208303A1; DE102014207148A1; DE102015016334A1; CN106099322A; DE102011016294B4; DE102012208303B4; CN109273867A; US10693220B2; DE102015016334B4; WO2015136178A1; US10741903B1; US12046806B2; WO2012136306A1; US9270018B2; WO2015078848A1; US10044418B2; WO2013171240A1; US9966659B2; WO2017174080A1; WO2019049739A1; WO2017102787A1; US10186762B2

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

**EP 1863119 A1 20071205**; **EP 1863119 B1 20110126**; DE 102006025176 A1 20071206; DE 102006025176 B4 20160525; DE 102006025176 C5 20230223; DE 502007006348 D1 20110310; DE 502007006354 D1 20110310; EP 1903632 A1 20080326; EP 1903632 B1 20110126; FR 2901920 A1 20071207; FR 2901920 B1 20100924; US 2007279304 A1 20071206; US 2013076577 A1 20130328; US 8319693 B2 20121127; US 8614645 B2 20131224

DOCDB simple family (application)

**EP 07010730 A 20070530**; DE 102006025176 A 20060530; DE 502007006348 T 20070530; DE 502007006354 T 20070530; EP 07010729 A 20070530; FR 0703827 A 20070530; US 201213683358 A 20121121; US 75405507 A 20070525