

Title (en)

Antenna matching system for motor vehicles

Title (de)

Antenne mit Impedanzanpassungssystem für Kraftfahrzeuge

Title (fr)

Antenne avec système de correspondance d'impédance pour véhicules automobiles

Publication

EP 2026473 B1 20101027 (EN)

Application

EP 07113394 A 20070730

Priority

EP 07113394 A 20070730

Abstract (en)

[origin: EP2026473A1] This invention relates generally to an improved system for connecting an integrated antenna to a car's ground point. The antenna matching system comprises a conductor (B) connected between an antenna element (A) and a first end of a feeder conductor (1) of a coaxial cable (C). A first end of the shielding conductor (2) of the coaxial cable is open, and a second end of the shielding conductor is adapted for its connection to a ground connection point (E) of a vehicle. The length of the conductor is selected to provide an inductive effect which substantially cancels the capacitive component of the antenna at the band of operation. The invention provides a matching system for the antenna of a motor vehicle, that allows to tune the antenna to the designed frequency independently of the selected ground point in the vehicle, so that a greater grade of freedom is obtained to design the antenna matching circuit.

IPC 8 full level

H04B 1/18 (2006.01); **H01Q 1/32** (2006.01)

CPC (source: EP)

H01Q 1/32 (2013.01)

Cited by

EP3787109A4; US11355844B2

Designated contracting state (EPC)

DE ES

DOCDB simple family (publication)

EP 2026473 A1 20090218; EP 2026473 B1 20101027; DE 602007010135 D1 20101209; ES 2352049 T3 20110215; WO 2009016076 A1 20090205

DOCDB simple family (application)

EP 07113394 A 20070730; DE 602007010135 T 20070730; EP 2008059634 W 20080723; ES 07113394 T 20070730