

Title (en)
IGNITION COIL FOR AN INTERNAL COMBUSTION ENGINE

Title (de)
ZÜNDSPULE FÜR EINE BRENNKRAFTMASCHINE

Title (fr)
BOBINE D'ALLUMAGE POUR MOTEUR A COMBUSTION INTERNE

Publication
EP 1706878 A1 20061004 (DE)

Application
EP 05701112 A 20050121

Priority
• EP 2005000601 W 20050121
• DE 102004003223 A 20040122

Abstract (en)
[origin: WO2005071701A1] The invention relates to an ignition coil for an internal combustion engine. Said ignition coil comprises a primary coil base (2) carrying a primary winding (1) and having an especially cylindrical shape, a low voltage connection area (10) for connecting the primary winding (1) to a low voltage, a secondary winding (3) inductively coupled to the primary winding (1) and disposed on an especially cylindrical secondary coil base (4), for providing a high voltage for the spark plug of the internal combustion engine. The primary coil base (2) and the secondary coil base (4) are mounted concentric to one another. The ignition coil also comprises a high-voltage connection area (5) in which the secondary winding (3) contacts the spark plug. The aim of the invention is to improve the ignition coil of the aforementioned type with respect to its electromagnetic compatibility. For this purpose, an electrically conducting layer (16) which has a substantially cylindrical shape and mechanical damping properties is provided inside an annular space defined by the outer winding of the two windings (1, 3). Said layer is configured as a sandwich structure and consists of at least two partial layers (16a, 16b) with an interposed intermediate layer (17).

IPC 8 full level
H01F 27/33 (2006.01); **H01F 27/36** (2006.01); **H01F 38/12** (2006.01)

CPC (source: EP US)
H01F 27/36 (2013.01 - EP US); **H01F 27/361** (2020.08 - EP US); **H01F 38/12** (2013.01 - EP US); **H01F 27/33** (2013.01 - EP US)

Citation (search report)
See references of WO 2005071701A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2005071701 A1 20050804; DE 102004003223 B3 20050825; EP 1706878 A1 20061004; EP 1706878 B1 20150617; JP 2007520882 A 20070726; JP 4654202 B2 20110316; US 2008224810 A1 20080918; US 7952456 B2 20110531

DOCDB simple family (application)
EP 2005000601 W 20050121; DE 102004003223 A 20040122; EP 05701112 A 20050121; JP 2006550055 A 20050121; US 58710708 A 20080508