

Title (en)

Symmetrical induction coils, in particular for proximity sensors

Title (de)

Symmetrische induktive Bauelemente, insbesondere für Näherungssensoren

Title (fr)

Inductance symetrique, en particulier pour detecteurs de proximite

Publication

EP 2237292 A3 20110330 (FR)

Application

EP 10354015 A 20100326

Priority

FR 0901638 A 20090403

Abstract (en)

[origin: EP2237292A2] The coil (20) has a front face (28) and an opposite face including a package of conductive wires (22) between winding ends (26A, 26B) with superposition of internal winding layers (24i). The winding ends are located on an external winding layer (24n). The winding ends are located at a center of the coil between the front and opposite faces such that the external layer includes two symmetrical portions composed of equal number of wire turns wound in two opposite directions. Independent claims are also included for the following: (1) a proximity detection device comprising an electronic circuit for determining distance of a metallic object with respect to a frontal face of an induction coil (2) a method for fabrication of an induction coil.

IPC 8 full level

H01F 41/06 (2006.01)

CPC (source: EP)

H01F 41/086 (2016.01)

Citation (search report)

- [A] US 3743853 A 19730703 - DITTMAN K, et al
- [A] US 3996510 A 19761207 - GUICHARD ROBERT CHARLES
- [A] US 4455528 A 19840619 - WALKER HEINZ [DE]
- [A] EP 0455613 A2 19911106 - DREONI ALESSANDRO [IT]
- [A] WO 2005098370 A1 20051020 - KSR INT CO [CA], et al
- [A] DE 202007003687 U1 20080710 - PEPPERL & FUCHS [DE]
- [AD] JP 2007165757 A 20070628 - GOTO DENSHI KK

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CN113031085A; EP2608229A3

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

Designated extension state (EPC)

AL BA ME RS

DOCDB simple family (publication)

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