

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 A2 20101006 (FR)

Application

EP 10354015 A 20100326

Priority

FR 0901638 A 20090403

Abstract (en)

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.

Abstract (fr)

Une technique de bobinage permet d'obtenir une inductance (20) symétrique, de sorte qu'un capteur de proximité inductif (40) l'utilisant ait une immunité aux champs électromagnétiques optimisée. La dernière couche (24 n) de l'inductance (20) est rendue symétrique, avec les deux extrémités (26A, 26B) de l'enroulement débouchant sensiblement au centre de l'inductance (20), de façon à restreindre au maximum l'influence néfaste des couplages capacitifs avec le boîtier (46).

IPC 8 full level

H01F 41/06 (2006.01)

CPC (source: EP)

H01F 41/086 (2016.01)

Citation (applicant)

JP 2007165757 A 20070628 - GOTO DENSHI KK

Cited by

CN113031085A; EP2608229A3

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Designated extension state (EPC)

AL BA ME RS

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