Title (en)

SPLIT-CORE COUPLER FOR INDUCTIVE POWER TRANSFER

Title (de)

KOPPLER MIT GETEILTEM KERN ZUR INDUKTIVEN ENERGIEÜBERTRAGUNG

Title (fr)

COUPLEUR À NOYAU FENDU POUR TRANSFERT DE PUISSANCE INDUCTIVE

Publication

EP 3709315 A1 20200916 (EN)

Application

EP 19163049 A 20190315

Priority

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Abstract (en)

The subject of the invention is a split-core coupler for inductive power transfer, and more specially the invention relates to the split-core coupler used in wireless charging system in which the supply and receiving side are separated by some insulating gap having a specially designated thickness ensuring relatively large value of the coupling coefficient and, at the same time, enabling for movement of a transmitter relatively to a receiver or vice versa in an improved way. The invention is characterized in that the two parts (A) and part (B) of the split-core transformer are movable connected together during the matching and also during a charging process. The second core column (4) which is placed between the yokes (1) has at least three degrees of freedom in horizontal, vertical and torsional directions or combinations of all these directions during the charging process when the magnetic circuit of the split-core coupler is closed.

IPC 8 full level

H01F 3/10 (2006.01); **H01F 38/14** (2006.01)

CPC (source: EP)

H01F 3/10 (2013.01); **H01F 38/14** (2013.01)

Citation (applicant)

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- WO 2015067816 A1 20150514 - BOSCH GMBH ROBERT [DE]
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Designated contracting state (EPC)

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