Title (en)

Wireless energy transfer

Title (de

Drahtlose Energieübertragung

Title (fr)

Transfert d'énergie sans fil

Publication

EP 2541564 A1 20130102 (EN)

Application

EP 11171991 A 20110629

Priority

EP 11171991 A 20110629

Abstract (en)

A system and method are provided for induction mediated energy transfer through a metal wall. A first metal plate shape (22) is arranged in a manner that a secondary coil (12) is located between the first metal plate shape (22) and the metal wall (13), wherein the first metal plate shape (22) follows the coil windings in tangential direction and comprises an isolation barrier (50) arranged between lateral sides of the first metal shape thereby preventing electric conduction across the barrier in a tangential direction. In an embodiment, a secondary magnetic field generator (23, 24) is positioned on the metal wall and adjacent opposite lateral sides of the first metal plate shape (22) thereby generating a secondary magnetic field (B2) extending into the wall along a contour between opposite lateral sides and directed between said lateral sides of the first metal plate shape so as to displace at least part of the primary magnetic field (B1) from the wall (13) and through the secondary coil (12).

IPC 8 full level

H01F 38/14 (2006.01)

CPC (source: EP)

H01F 38/14 (2013.01)

Citation (applicant)

WO 2009143541 A2 20091203 - ZANGL HUBERT [AT], et al

Citation (search report)

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- [A] WO 2009143541 A2 20091203 ZANGL HUBERT [AT], et al
- [A] US 2010036523 A1 20100211 SATO YUSHI [JP], et al

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EP3352390A4; US10484049B2; US9929597B2; WO2014133480A3; WO2015035860A1

Designated contracting state (EPC)

AL 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 RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

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