Abstract

Device and Method for the detection of an Interfering Body in a System for the Inductive Transfer of Energy and a System for the Inductive Transfer of Energy

The invention relates to a method and a device for the detection of at least one interfering body in a system for the inductive transfer of energy, wherein the system for the inductive transfer of energy comprises at least one primary coil unit (18) for generating at least a part of an electromagnetic power transfer field, wherein the device comprises at least one means for the detection of interfering bodies (48, 25, 50), wherein the at least one means for detection of interfering bodies (48, 25, 50) comprises at least one exciter coil means (12) for generating an exciter field and at least one detector coil means (14) which is associated with the at least one exciter coil means (12), wherein the device comprises at least one evaluation means (25) for detecting a coupling state between the at least one exciter coil means (12) and the at least one detector coil means (14) and/or for detecting a change of the coupling state, wherein the interfering body is detectable as a function of the coupling state and/or of the change of the coupling state, wherein the device comprises at least one compensation means (16) for taking account of an electromagnetic influence of the primary coil unit (18) and/or of the secondary coil unit (38) on the coupling state between the at least one exciter coil means (12) and the at least one detector coil means (14), as well as a system for the inductive transfer of energy.

(Fig. 1)