

Title (en)
DEVICE AND SYSTEM FOR A CONTACTLESS ENERGY TRANSMISSION

Title (de)
VORRICHTUNG UND SYSTEM ZUR BERÜHRUNGSLOSEN ENERGIEÜBERTRAGUNG

Title (fr)
DISPOSITIF ET SYSTÈME DE TRANSMISSION D'ÉNERGIE SANS CONTACT

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Application
EP 21745718 A 20210713

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Abstract (en)
[origin: WO2022042931A1] The invention relates to a device (20) for a contactless energy transmission to a mobile load, comprising an energy source (40), which generates a primary current (I1), and a primary conductor (11), which is provided in the form of a primary loop (21) and has a first inductor (L1), wherein the primary conductor (11) is connected to the energy source (40), and the primary current (I1) flows through the primary conductor. The device (20) comprises a secondary conductor (12), which is provided in the form of a secondary loop (22) and has a second inductor (L2), and a capacitor (C2). The secondary conductor (12) is connected to the capacitor (C2) such that the second inductor (L2) and the capacitor (C2) form a resonant circuit, and the primary loop (21) and the secondary loop (22) are provided such that the primary conductor (11) and the secondary conductor (12) run parallel over a coupling region with a coupling length (D). The primary conductor (11) and the secondary conductor (12) are inductively coupled in the coupling region such that a secondary current (I2) flows through the secondary conductor (12). The invention also relates to a system for a contactless energy transmission, comprising a device (20) according to the invention and a mobile load which has a transmitter head (50) for receiving energy, said transmitter head (50) comprising a tertiary winding (31) and being arranged such that the tertiary winding (31) is inductively coupled to the primary conductor (11).

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