Title (en)

IMPROVED ISOLATED POWER TRANSFER DEVICE

Title (de)

VERBESSERTE ISOLIERLEISTUNGSTRANSFEREINRICHTUNG

Title (fr)

DISPOSITIF DE TRANSFERT DE PUISSANCE ISOLE PERFECTIONNE

Publication

EP 2011220 A2 20090107 (FR)

Application

EP 07728577 A 20070426

Priority

- EP 2007054122 W 20070426
- FR 0603731 A 20060426

Abstract (en)

[origin: WO2007122268A2] An isolated transfer device with a particular topology including a switching step-up voltage circuit on the primary, with a step-up inductance (LB) and an active buffer stage (D_T, M_T, C_T) providing a peak voltage greater than the peak voltage output by the input voltage source (VE) and two pairs of controlled switches controlling application of voltage supplied by the switching step-up voltage circuit to the terminals (E_{p1}, E_{p2}) of the primary winding, and a dual alternating rectifier (D_{S1}, D_{S2}) with diodes and controlled switches (M_{S1},M_{S2}) on the secondary. On the primary, the voltage at the terminals of the capacitor C_T of the active buffer stage to apply a controlled alternating voltage between the terminals E_{p1} and E_{p2} is regulated by controlling the duration during which the controlled switches of the pairs are simultaneously in the closed state. On the secondary, Vs is regulated by controlling the duration during which the secondary switches are simultaneously in the closed state.

IPC 8 full level

H02M 3/335 (2006.01)

CPC (source: EP US)

H02M 3/33576 (2013.01 - EP US); H02M 1/0085 (2021.05 - EP)

Citation (search report)

See references of WO 2007122268A2

Designated contracting state (EPC)

DE GB

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

WO 2007122268 A2 20071101; **WO 2007122268 A3 20080117**; EP 2011220 A2 20090107; FR 2900513 A1 20071102; FR 2900513 B1 20100521; US 2009129123 A1 20090521; US 7859861 B2 20101228

DOCDB simple family (application)

EP 2007054122 W 20070426; EP 07728577 A 20070426; FR 0603731 A 20060426; US 29752507 A 20070426