

Title (en)

HIGH-FREQUENCY SUPPLY OF A LOAD WITHOUT IMPEDANCE MATCHING

Title (de)

HOCHFREQUENZVERSORGUNG EINER LAST OHNE IMPEDANZANPASSUNG

Title (fr)

ALIMENTATION HAUTE FRÉQUENCE D'UNE CHARGE SANS ADAPTATION D'IMPÉDANCE

Publication

EP 2539916 A2 20130102 (DE)

Application

EP 11703848 A 20110131

Priority

- DE 102010008777 A 20100222
- EP 2011051278 W 20110131

Abstract (en)

[origin: WO2011101226A2] An energy supplying device for a load (1) has a direct current source (2), a number of switching stages (3), and a control device (4). The switching stages (3) are connected to the direct current source (2), the load (1), and the control device (4) such that the load (1) can be connected to the direct current source (2) on the basis of a corresponding control of the switching stages (3) by the control device (4). Each of the switching stages (3) has a field effect transistor (5) and a number of freewheeling diodes (9, 9') that are connected in opposition to the respective field effect transistor (5) in parallel. The field effect transistors (5) have a threshold frequency (f_G) to which said transistors can be maximally operated. Each freewheeling diode (9, 9') has a recovery time (T). For each switching stage (3), the recovery times (T) of all the freewheeling diodes (9, 9') that are connected in opposition to the respective field effect transistor (5) in parallel correspond at least approximately with the reciprocal value of the threshold frequency (f_G) of the respective field effect transistor (5). The control device (4) controls the switching stages (3) at least intermittently such that power is reflected back into the switching stages (3) on the basis of a mismatch.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

See references of WO 2011101226A2

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