Title (en)

SERIES VOLTAGE REGULATOR WITH ELECTRONICS PROTECTED AGAINST SHORT-CIRCUITS BY MAGNETIC CIRCUIT-BASED DECOUPLING USING HOLES AND WINDOWS

Title (de)

SERIENSPANNUNGSREGLER MIT ELEKTRONIK MIT KURZSCHLUSSSCHUTZ DURCH MAGNETISCHE SCHALTBASIERTE ENTKOPPLUNG MIT LÖCHERN UND FENSTERN

Title (fr)

RÉGULATEUR DE TENSION SÉRIE À ÉLECTRONIQUE PROTÉGÉE DES COURTS-CIRCUITS PAR UN DÉCOUPLAGE PAR CIRCUIT MAGNÉTIQUE À TROUS ET FENÊTRES

Publication

EP 2686746 A2 20140122 (FR)

Application

EP 12709635 A 20120319

Priority

- FR 1152235 A 20110318
- EP 2012054806 W 20120319

Abstract (en)

[origin: WO2012126884A2] Voltage regulator (10), suitable for being connected in series between on the one hand an AC source (S) and on the other hand a load (C), comprising a magnetic circuit (2) comprising a first core (21) and a second core (22), at least one first inductive coil (2) coiled at least partially around the first core (21) and linked on the one hand to the AC source (S) and on the other hand to the load (C), and at least one voltage converter (4) comprising a second core (7) coiled around the second core (22), the regulator (10) being characterized in that the circuit (2) comprises a third decoupling core (3) and a virtual gap (EV), the virtual gap (EV) comprising at least one pair (50) of holes (5) in the third decoupling core (3), and a winding (6) wound between the holes (5) of each pair (50) of holes (5), and linked to a DC current source (8), the regulator (10) operating between at least two states.

IPC 8 full level

G05F 1/32 (2006.01); **G05F 1/325** (2006.01); **H01F 29/14** (2006.01)

CPC (source: EP)

G05F 1/32 (2013.01); **G05F 1/325** (2013.01); **H01F 29/14** (2013.01)

Citation (search report)

See references of WO 2012126884A2

Cited by

WO2022258278A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

FR 2972865 A1 20120921; **FR 2972865 B1 20130412**; EP 2686746 A2 20140122; EP 2686746 B1 20150422; ES 2543310 T3 20150818; PL 2686746 T3 20151030; WO 2012126884 A2 20120927; WO 2012126884 A3 20130725

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