Title (en)

SWITCHED-MODE POWER SUPPLY UNIT WHEREIN DEVICES ARE SUPPLIED WITH POWER INDEPENDENTLY OF THE OPERATING STATE OF THE POWER COMPONENT

Title (de)

SCHALTNETZTEIL MIT VOM BETRIEBSZUSTAND DES LEISTUNGSTEILS UNABHÄNGIGER VERSORGUNG VON EINRICHTUNGEN

Title (fr)

PARTIE DE RESEAU DE DISTRIBUTION A ALIMENTATION DE DISPOSITIFS INDEPENDANTE DU MODE DE FONCTIONNEMENT DE LA PARTIE D'ALIMENTATION

Publication

EP 1847009 A1 20071024 (DE)

Application

EP 06707889 A 20060130

Priority

- EP 2006050510 W 20060130
- DE 102005006175 A 20050210

Abstract (en)

[origin: WO2006084797A1] The invention relates to a switched-mode power supply unit which comprises a transformer having at least one secondary winding (5) that can be connected to a load via a rectifier arrangement, and at least one primary winding (4) having a first winding connection that is connected to a connection for a reference potential via a switch element (2) and a second connection that can be connected to a direct current (U1). The switched-mode power supply unit also comprises a control device (6) for adjusting the turnon and turnoff times of the switch element (2). At least one auxiliary secondary winding (17) of the transformer is provided for independently supplying devices (7) and can be connected to the devices (7) to be supplied via an auxiliary rectifier arrangement. A clocked auxiliary device (19) generates a clocked current (I2) from a direct current source. At least one auxiliary primary winding (15) of the transformer is connected to the clocked current source. The inventive switched-mode power supply unit allows to use the transformer core (3) present in the switched-mode power supply unit also to transmit the auxiliary power for supplying devices (7) on the secondary side without impairing the function of the main supply.

IPC 8 full level (invention and additional information)

H02M 3/335 (2006.01); **H01F 5/00** (2006.01); **H01F 27/28** (2006.01); **H02J 9/06** (2006.01)

CPC (invention and additional information)

H01F 27/38 (2013.01); **H01F 30/10** (2013.01); **H02J 9/005** (2013.01); **H02M 3/33569** (2013.01); H01F 2038/026 (2013.01); H02M 2001/0006 (2013.01); H02M 2001/0064 (2013.01); H02M 2001/009 (2013.01)

Citation (search report)

See references of WO 2006084797A1

Designated contracting state (EPC)

AT DE FR IT

EPO simple patent family

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INPADOC legal status

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2014-05-21 [RAP1] TRANSFER OF RIGHTS OF AN APPLICATION
- Owner name : SIEMENS AKTIENGESELLSCHAFT

2013-03-13 [RAP1] TRANSFER OF RIGHTS OF AN APPLICATION
- Owner name : SIEMENS AKTIENGESELLSCHAFT

2010-04-07 [RAP1] TRANSFER OF RIGHTS OF AN APPLICATION
- Owner name : SIEMENS AKTIENGESELLSCHAFT

2008-05-14 [DAX] REQUEST FOR EXTENSION OF THE EUROPEAN PATENT (TO ANY COUNTRY) (DELETED)

2008-05-14 [RBV] DESIGNATED CONTRACTING STATES (CORRECTION)
- Designated State(s) : AT DE FR IT

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