

Title (en)
ELECTRIC SWITCH POWER SUPPLY

Title (de)
ELEKTRISCHES SCHALTNETZTEIL

Title (fr)
ALIMENTATION D'INTERRUPTEUR ELECTRIQUE

Publication
EP 1547110 A1 20050629 (EN)

Application
EP 03797334 A 20030923

Priority
• FI 0300692 W 20030923
• FI 20021692 A 20020923

Abstract (en)
[origin: WO2004027807A1] The invention relates to a method for realizing power supply into an electric switch (1), and a respective power supply arrangement for an electric switch. The switch is arranged in the current path (J), between an AC current source (E), preferably an AC current mains, and a load (L) in order to interrupt and enable power supply. The switch is also arranged in series with the primary circuit (W1) of a current transformer (3). The electric power required by the control unit (2) of the switch and possibly of the switch itself is taken over the switch when the switch is on (a) and from the secondary circuit (W2) of the current transformer via a rectifier (4), when the switch is off and power is fed to the load (L). According to the invention, the current transformer (3) is arranged to function so that it is saturated at each halfcycle of the mains current, and the saturation peaks (KP) of the secondary voltage (W2; W2a; W2b) of the secondary circuit of the current transformer are rectified in order to obtain direct electric power, when the switch (1) is off (k).

IPC 1-7
H01H 47/22; **H01H 47/00**

IPC 8 full level
H01H 47/00 (2006.01)

CPC (source: EP)
H01H 47/007 (2013.01)

Citation (search report)
See references of WO 2004027807A1

Citation (examination)
US 2183646 A 19391219

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2004027807 A1 20040401; AU 2003262614 A1 20040408; AU 2003262614 B2 20071220; CN 100372039 C 20080227; CN 1685458 A 20051019; EP 1547110 A1 20050629; FI 113502 B 20040430; FI 20021692 A0 20020923; NO 20052005 L 20050425; NO 328490 B1 20100301; PL 206414 B1 20100831; PL 375739 A1 20051212; RU 2005111544 A 20060227; RU 2316074 C2 20080127

DOCDB simple family (application)
FI 0300692 W 20030923; AU 2003262614 A 20030923; CN 03822600 A 20030923; EP 03797334 A 20030923; FI 20021692 A 20020923; NO 20052005 A 20050425; PL 37573903 A 20030923; RU 2005111544 A 20030923