

Title (en)
CAPACITOR SUPPLY UNIT

Title (de)
KONDENSATORNETZTEIL

Title (fr)
BLOC D'ALIMENTATION A CONDENSATEURS

Publication
EP 1036432 A1 20000920 (DE)

Application
EP 98963437 A 19981110

Priority
• DE 19754239 A 19971206
• EP 9807183 W 19981110

Abstract (en)
[origin: DE19754239A1] The invention relates to a capacitor supply unit, comprising a charging capacitor for charging up another capacitor (storage capacitor) for operating an electrical consumer, a rectifier (4, 5) which is located between the charging capacitor (2) and the storage capacitor (3), and a switching element (6, 12) which is located between the charging capacitor (2) and the storage capacitor (3) in circuit terms. Said switching element (6, 12) has a control input (7) to which the output of a switching time determining element (9) is applied. The switching time determining element (9) is subjected to a reference voltage U_{prot} which is small in comparison with the alternate current supply voltage $U_{SIMILAR}$, and determines the instant at which the switching element (6, 12) switches from a switch position in which the storage capacitor (3) is charged to a switch position in which the charging process is interrupted, according to the voltage U_s being applied to the charging capacitor (2) at the output end. The output of a charge status determining element (10) for determining the charge status of the storage capacitor (3) is also applied to said control input (7). Interconnected to represent a logical AND operation, the interconnecting switching time determining element (9) and the charge status determining element (10) act upon the control input of the switching element (6, 12) in such a way that both switching operations of the switching element (6, 12) - switching the capacitor supply unit (1) into charging mode or switching the same to interrupt the charging process - take place at a time when the voltage U_s being applied to the charging capacitor (2) at the output end is less than or equal to the reference voltage U_{prot} .

IPC 1-7
H02M 3/156

IPC 8 full level
H02M 3/07 (2006.01); **H02M 7/155** (2006.01)

CPC (source: EP US)
H02M 7/155 (2013.01 - EP US); **H02M 7/05** (2021.05 - EP)

Citation (search report)
See references of WO 9930408A1

Designated contracting state (EPC)
DE ES FR GB IT

DOCDB simple family (publication)
DE 19754239 A1 19990610; AU 1871699 A 19990628; BR 9810539 A 20000905; EP 1036432 A1 20000920; JP 2002509690 A 20020326; US 6366058 B1 20020402; WO 9930408 A1 19990617

DOCDB simple family (application)
DE 19754239 A 19971206; AU 1871699 A 19981110; BR 9810539 A 19981110; EP 9807183 W 19981110; EP 98963437 A 19981110; JP 52976999 A 19981110; US 53063300 A 20000503