

Title (en)
Current regulation circuit

Title (de)
Schaltungsvorrichtung zur Stromregelung

Title (fr)
Circuit de régulation de courant

Publication
EP 0901057 B1 20030226 (DE)

Application
EP 98114690 A 19980805

Priority
DE 29715925 U 19970905

Abstract (en)
[origin: EP0901057A2] A circuit (1) for controlling the current taken by the coil (14) of an electromagnetically operated relay energised from a bridge rectifier (6) has a regulator unit (26) which exercises pulse control of the excitation of the coil (14) via a MOSFET switch (15) in response to the module (29). During operation the coil current (15) is measured as a voltage (UM) across the resistor (16) and compared with recorded reference nouns to ensure conformity with the fundamentally different levels of excitation which characterise armature closing and holding. Evaluation and control of these phases of operation is exercised by the modules (20,21,25) and a flywheel circuit (13,17,18) protects against high induced voltages during pulse switching.

IPC 1-7
G05F 1/569

IPC 8 full level
G05F 1/56 (2006.01); **G05F 1/569** (2006.01); **H01F 7/18** (2006.01)

CPC (source: EP US)
G05F 1/56 (2013.01 - EP US); **H01F 7/1805** (2013.01 - EP US); **H01F 7/1844** (2013.01 - EP US)

Cited by
CN105955393A; DE102004058159A1; DE102004058159B4; DE102015101778A1

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
DE 29715925 U1 19971023; DE 59807292 D1 20030403; EP 0901057 A2 19990310; EP 0901057 A3 19990512; EP 0901057 B1 20030226; US 6262874 B1 20010717

DOCDB simple family (application)
DE 29715925 U 19970905; DE 59807292 T 19980805; EP 98114690 A 19980805; US 14830398 A 19980904