

Title (en)
CONTROL CIRCUIT FOR AN ELECTROMAGNETIC RELAY

Title (de)
ANSTEUERSCHALTUNG FÜR EIN ELEKTROMAGNETISCHES RELAIS

Title (fr)
CIRCUIT DE COMMANDE D'UN RELAIS ÉLECTROMAGNÉTIQUE

Publication
EP 2656365 B1 20180711 (DE)

Application
EP 10798789 A 20101220

Priority
EP 2010070245 W 20101220

Abstract (en)
[origin: WO2012084002A1] The invention relates to a drive circuit (10) for an electromagnetic relay having a relay coil (11) and switch contacts, comprising a first switching device (13a), which is arranged between a first terminal of the relay coil (11) and a first voltage source (12a), a second switching device (13b), which is arranged between a second terminal of the relay coil (11) and a zero potential, and a control device (14) which is designed to produce a current flow through the relay coil (11) to close both switching devices (13a, 13b). In order to provide a drive circuit which, firstly, has the shortest possible response time and, secondly, can be produced constructively simply and therefore cost- effectively, a second voltage source (12b) be provided, which is connected via a third switching device (13c) to the first terminal of the relay coil (11), wherein the third switching device (13c) is arranged connected in parallel with the first switching device (13a), and the second voltage source (12b) has a higher voltage level than the first voltage source (12a), and the control device (14) is designed to produce a current flow through the relay coil (11), initially to close all three switching devices (13a, 13b, 13c) and, following the expiry of a predefined time period, firstly to open the third switching device (13c) again and secondly to keep the first and the second switching device (13a, 13b) closed.

IPC 8 full level
H01H 47/04 (2006.01); **H01H 47/22** (2006.01)

CPC (source: EP US)
H01H 47/04 (2013.01 - EP US); **H01H 47/22** (2013.01 - EP US); **H01H 47/32** (2013.01 - EP US)

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
WO 2012084002 A1 20120628; BR 112013015621 A2 20180522; BR 112013015621 B1 20200310; CN 103262198 A 20130821; CN 103262198 B 20160113; EP 2656365 A1 20131030; EP 2656365 B1 20180711; RU 2013133667 A 20150127; RU 2553274 C2 20150610; US 2013279061 A1 20131024; US 8988844 B2 20150324

DOCDB simple family (application)
EP 2010070245 W 20101220; BR 112013015621 A 20101220; CN 201080070731 A 20101220; EP 10798789 A 20101220; RU 2013133667 A 20101220; US 201013996283 A 20101220