

Title (en)

METHOD AND CONTROL UNIT FOR ZERO CROSS RELAY SWITCHING

Title (de)

VERFAHREN UND STEUEREINHEIT ZUR NULL-KREUZ-RELAISSCHALTUNG

Title (fr)

PROCÉDÉ ET UNITÉ DE COMMANDE DE COMMUTATION DE RELAIS À PASSAGE À ZÉRO

Publication

EP 4165674 A1 20230419 (EN)

Application

EP 21729463 A 20210526

Priority

- DE 102020207276 A 20200610
- EP 2021063962 W 20210526

Abstract (en)

[origin: WO2021249770A1] A method (600) for controlling a relay (1) is described. The method (600) comprises applying (601), at a control time instant (313), a control signal to a control port (4) of the relay (1) for initiating a switch-off event or a switch-on event of the relay (1), wherein the control time instant (313) depends on a previously determined control delay (315) of the relay (1). The method (600) further comprises determining (602) arc information (406) regarding the formation of an arc between contacts (5) of the relay (1) during the switch-off event or the switch-on event of the relay (1), and updating (603) the control delay (315) based on the arc information (406).

IPC 8 full level

H01H 47/18 (2006.01)

CPC (source: EP)

H01H 47/18 (2013.01); **H01H 9/50** (2013.01); **H01H 47/002** (2013.01); **H01H 47/22** (2013.01); **H01H 50/24** (2013.01)

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

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

DE 102020207276 A1 20211216; EP 4165674 A1 20230419; EP 4165674 B1 20240807; WO 2021249770 A1 20211216

DOCDB simple family (application)

DE 102020207276 A 20200610; EP 2021063962 W 20210526; EP 21729463 A 20210526