

Title (en)

SWITCHING DEVICE FOR CONDUCTING AND INTERRUPTING ELECTRICAL CURRENTS

Title (de)

SCHALTVORRICHTUNG ZUM FÜHREN UND TRENNEN VON ELEKTRISCHEN STRÖMEN

Title (fr)

DISPOSITIF DE COMMUTATION POUR ACHEMINER ET COUPER DES COURANTS ÉLECTRIQUES

Publication

EP 3453042 B1 20220330 (DE)

Application

EP 17716244 A 20170410

Priority

- DE 102016108245 A 20160503
- EP 2017058566 W 20170410

Abstract (en)

[origin: WO2017190914A1] The invention relates to a switching device for conducting and interrupting electrical currents comprising a mechanical contact assembly (10), a semiconductor switch (20) connected in parallel to the mechanical contact assembly (10), and a switching electronics system (50) designed for switching on and off the semiconductor switch (20) during a switching process of the mechanical contact assembly (10) for commutating an electrical current from the mechanical contact assembly (10) to the semiconductor switch (20). According to the invention, the switching electronics system (50) is configured to detect switching processes of the mechanical contact assembly (10) and, based thereon, to control the switching on and off of the semiconductor switch (20) during a switching process of the mechanical contact assembly (10) in such a way that a conditioning of contact surfaces (108, 110) of contacts (104, 106) of the mechanical contact assembly (10) can occur.

IPC 8 full level

H01H 9/54 (2006.01); **H01H 1/00** (2006.01); **H01H 1/60** (2006.01); **H01H 33/664** (2006.01)

CPC (source: EP)

H01H 1/60 (2013.01); **H01H 9/542** (2013.01); H01H 33/664 (2013.01); H01H 2009/543 (2013.01); H01H 2009/544 (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

DOCDB simple family (publication)

DE 102016108245 A1 20171109; EP 3453042 A1 20190313; EP 3453042 B1 20220330; PL 3453042 T3 20220816;
WO 2017190914 A1 20171109

DOCDB simple family (application)

DE 102016108245 A 20160503; EP 17716244 A 20170410; EP 2017058566 W 20170410; PL 17716244 T 20170410