

Title (en)
DC VOLTAGE SWITCH

Title (de)
GLEICHSPANNUNGSSCHALTER

Title (fr)
INTERRUPEUR POUR TENSION CONTINUE

Publication
EP 3414838 A1 20181219 (DE)

Application
EP 17711631 A 20170316

Priority

- DE 102016204400 A 20160317
- EP 2017056224 W 20170316

Abstract (en)
[origin: WO2017158082A1] The invention relates to a DC voltage switch having a first and second terminal for serial incorporation in a first pole of a DC voltage network, wherein a secondary current path having a semiconductor switch extends between the terminals, and an operating current path having a mechanical switch and, in series therewith, the primary-side winding of a transformer is arranged in parallel with the secondary current path, the secondary-side winding of the transformer is wired between a voltage source and a third terminal for incorporation into a second pole of the DC voltage network, a switch in series with the secondary-side winding of the transformer is arranged between the voltage source and the third terminal, the voltage source is connected to the first terminal via a diode and a charging resistor, there is a control device for driving the switch, which is configured to determine the voltage of the voltage source repeatedly after the mechanical switch has been opened and to switch the switch on at intervals in such a way that the voltage determined remains below a definable threshold value.

IPC 8 full level
H03K 17/16 (2006.01); **H01H 9/54** (2006.01); **H01H 33/59** (2006.01)

CPC (source: EP KR RU US)
H01H 9/542 (2013.01 - KR RU); **H01H 33/596** (2013.01 - EP KR RU US); **H03K 17/16** (2013.01 - EP KR RU US); **H01H 9/542** (2013.01 - EP US)

Citation (search report)
See references of WO 2017158082A1

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

DOCDB simple family (publication)
WO 2017158082 A1 20170921; CN 108781075 A 20181109; DE 102016204400 A1 20170921; EP 3414838 A1 20181219;
KR 20180122003 A 20181109; RU 2703190 C1 20191015; US 2019074149 A1 20190307

DOCDB simple family (application)
EP 2017056224 W 20170316; CN 201780017950 A 20170316; DE 102016204400 A 20160317; EP 17711631 A 20170316;
KR 20187029924 A 20170316; RU 2018134021 A 20170316; US 201716084484 A 20170316