

Title (en)  
VOLTAGE MONITORING DEVICE

Title (de)  
SPANNUNGSÜBERWACHUNGSVORRICHTUNG

Title (fr)  
DISPOSITIF DE SURVEILLANCE DE TENSION

Publication  
**EP 3859763 A1 20210804 (EN)**

Application  
**EP 20154631 A 20200130**

Priority  
EP 20154631 A 20200130

Abstract (en)  
A voltage monitoring device comprises input connectors for receiving an input voltage, a linkage (7, 8, 14), a spring (12) for urging the linkage (7, 8, 14) towards a first stable position, and a solenoid (5) powered by the input voltage and adapted to displace the linkage (7, 8, 14) from the first position to a second position if a voltage applied to the solenoid (5) exceeds a first threshold, and to maintain the linkage in the second position while the voltage applied to the solenoid exceeds a second threshold lower than the first threshold. A switch (22) controlled by the linkage (7, 8, 14) is connected to the input connectors and to the solenoid (5) so as apply a first percentage of the input voltage to the solenoid (5) while the linkage (7, 8, 14) is in the first position and to apply a second percentage of the input voltage (Vcc) to the solenoid (5) while the linkage (7, 8, 14) is in the second position, the second percentage being less than the first percentage.

IPC 8 full level  
**H01H 83/12** (2006.01); **H02H 3/24** (2006.01); **H01H 71/02** (2006.01)

CPC (source: CN EP)  
**H01H 71/24** (2013.01 - CN); **H01H 83/12** (2013.01 - EP); **H01H 2071/0278** (2013.01 - EP)

Citation (applicant)  
DE 20110741 U1 20010906 - SIEMENS AG [DE]

Citation (search report)

- [A] US 4370635 A 19830125 - CARROLL JOHN T, et al
- [A] US 2005162246 A1 20050728 - LIN TZO-ING [TW]
- [A] US 4183071 A 19800108 - RUSSELL RONALD R [US]
- [A] US 6233129 B1 20010515 - BAUMGAERTL ULRICH [DE], et al
- [AD] DE 20110741 U1 20010906 - SIEMENS AG [DE]
- [A] EP 1122758 A2 20010808 - KOPP HEINRICH AG [DE]

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)  
**EP 3859763 A1 20210804**; **EP 3859763 B1 20220921**; CN 113205981 A 20210803

DOCDB simple family (application)  
**EP 20154631 A 20200130**; CN 202110124981 A 20210129