

Title (en)

SWITCHING DEVICE FOR SWITCHING HIGH ELECTRIC CURRENTS, AND BATTERY SYSTEM COMPRISING SUCH A SWITCHING DEVICE

Title (de)

SCHALTVORRICHTUNG ZUM SCHALTEN HOHER ELEKTRISCHER STRÖME UND BATTERIESYSTEM MIT EINER SOLCHEN SCHALTVORRICHTUNG

Title (fr)

DISPOSITIF DE COMMUTATION POUR COMMUTER DES COURANTS ÉLECTRIQUES ÉLEVÉS ET SYSTÈME DE BATTERIES ÉQUIPÉ D'UN TEL DISPOSITIF DE COMMUTATION

Publication

**EP 3095123 B1 20200603 (DE)**

Application

**EP 15700013 A 20150102**

Priority

- DE 102014200681 A 20140116
- EP 2015050010 W 20150102

Abstract (en)

[origin: WO2015106975A1] The invention relates to a switching device (1) for switching high electric currents, in particular a contactor, having at least one first working contact (4, 4', 6, 6') and at least one second working contact (5, 5', 7, 7'). The working contacts are mutually spaced in a first switch position of the switching device (1) and contact each other in a second switch position of the switching device (1) in order to conduct an electric current. The switching device (1) comprises at least one wire (8) with a defined melting point in order to signal a wear of the working contacts. The at least one wire (8) is arranged in the region of an arc, which can be formed between the working contacts, at a distance to the at least one first working contact (4, 4', 6, 6') and the at least one second working contact (5, 5', 7, 7') such that the wire (8) is severed if the melting temperature is exceeded as a result of an arc formation. The invention further relates to a battery system comprising a switching device (1) according to the invention for galvanically isolating a battery from an electric load.

IPC 8 full level

**H01H 1/00** (2006.01); **H01H 9/02** (2006.01); **H01H 50/54** (2006.01); **H01H 85/30** (2006.01)

CPC (source: EP KR)

**H01H 1/0015** (2013.01 - EP KR); **H01H 50/541** (2013.01 - KR); **H01H 85/303** (2013.01 - KR); **H01H 85/306** (2013.01 - KR);  
**H01H 50/541** (2013.01 - EP); **H01H 85/303** (2013.01 - EP); **H01H 85/306** (2013.01 - EP); **H01H 2009/0292** (2013.01 - EP KR)

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 102014200681 A1 20150716**; CN 105900201 A 20160824; CN 105900201 B 20190115; EP 3095123 A1 20161123;  
EP 3095123 B1 20200603; KR 102305065 B1 20210928; KR 20160107180 A 20160913; WO 2015106975 A1 20150723

DOCDB simple family (application)

**DE 102014200681 A 20140116**; CN 201580004812 A 20150102; EP 15700013 A 20150102; EP 2015050010 W 20150102;  
KR 20167018573 A 20150102