

Title (en)

ELECTRICAL INTERRUPTION SWITCH, IN PARTICULAR FOR INTERRUPTING HIGH CURRENTS AT HIGH VOLTAGES

Title (de)

ELEKTRISCHES UNTERBRECHUNGSSCHALTGLIED, INSBESONDERE ZUM UNTERBRECHEN VON HOHEN STRÖMEN BEI HOHEN SPANNUNGEN

Title (fr)

ORGANE ÉLECTRIQUE DE COMMANDE D'INTERRUPTION, EN PARTICULIER POUR L'INTERRUPTION DE FORTS COURANTS À DES HAUTES TENSIONS

Publication

EP 3555900 B1 20230607 (DE)

Application

EP 17787320 A 20171004

Priority

- DE 102016124176 A 20161213
- DE 2017100844 W 20171004

Abstract (en)

[origin: WO2018001420A1] The invention relates to an electrical interruption switch, in particular for interrupting high currents at high voltages, especially high direct currents, comprising a housing that surrounds a contact unit defining the current path through the interruption switch, and comprising a pyrotechnical material that includes a gas-generating and/or shock wave-generating activatable material; the contact unit includes a first terminal contact, a second terminal contact and a disconnection region; the pyrotechnical material and the contact unit are designed in such a way that a current which is to be interrupted can be fed to the contact unit via the first terminal contact and be discharged therefrom via the second terminal contact, or vice versa, and in such a way that the disconnection region is subjected to a gas pressure and/or a shock wave generated by the activatable material when the pyrotechnical material is ignited, causing the disconnection region to tear open, cave in or be severed and the at least one chamber in the interruption switch that is at least partly delimited by the disconnection region to fill at least substantially in its entirety with a filling material, preferably silicone oil, so that the disconnection region comes into contact with the filling material in order for the highest possible bursting pressure to be exerted on the disconnection region using a minimum amount of gas-generating mass or - if a shock wave-generating pyrotechnical compound is used - for said shock wave-generating pyrotechnical compound to be coupled with as little loss as possible to the disconnection region that is to be disconnected. An insertable central electrode relieves the disconnection point and/or indicates the successful triggering of the interruption switch following the initial disconnection.

IPC 8 full level

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CPC (source: EP US)

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