

Title (en)
SWITCHING DEVICE WITH PERMANENT MAGNETIC ARC EXTINCTION

Title (de)
SCHALTGERÄT MIT PERMANENTMAGNETISCHER LICHTBOGENLÖSCHUNG

Title (fr)
APPAREIL DE COMMUTATION AVEC EXTINCTION D'ARC PAR AIMANT PERMANENT

Publication
EP 3157032 B1 20200304 (DE)

Application
EP 16200162 A 20160121

Priority
• DE 102015000796 A 20150122
• EP 16000145 A 20160121

Abstract (en)
[origin: US2016217951A1] The present invention relates to a switching device with at least one contact point and an arc blow device associated with the contact point, where the arc blow device comprises at least one blow magnet for generating a magnetic blow field, and where the blow field is of such nature that a switch arc developing when the contact point opens is blown out from the contact point. It is according to the invention provided that the blow field comprises a first magnetic field area and a second magnetic field area arranged adjacent to the first magnetic field area, where the magnetic field lines of the first magnetic field area are oriented in opposite direction to the magnetic field lines of the second magnetic field area, and where the blow field further comprises a transition area which connects the first magnetic field area and the second magnetic field area with each other, where the orientation of the magnetic field lines in the transition area, each starting out from the first magnetic field area and the second magnetic field area, aligns toward the contact point so that the switch arc within the transition area is in dependence of the direction of the current, starting out from the contact point, directed either into the first magnetic field area or into the second magnetic field area and there in both cases blown in the same direction away from the contact point.

IPC 8 full level
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Cited by
CN107887208A

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EP 3048626 A1 20160727; **EP 3048626 B1 20170614**; CN 105826102 A 20160803; CN 105826102 B 20180803; CN 109036908 A 20181218; CN 109036908 B 20200211; DE 102015000796 A1 20160728; DE 102015000796 B4 20170302; EP 3157032 A1 20170419; EP 3157032 B1 20200304; ES 2636797 T3 20171009; ES 2778843 T3 20200812; JP 2016146333 A 20160812; JP 6706081 B2 20200603; KR 101784586 B1 20171011; KR 20160090770 A 20160801; RU 2016101644 A 20170726; RU 2629563 C2 20170830; RU 2629563 C9 20180119; UA 113925 C2 20170327; US 2016217951 A1 20160728; US 9991073 B2 20180605; ZA 201600490 B 20170531

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