

Title (en)

ELECTRICAL SWITCHING APPARATUS COMPRISING AN IMPROVED ARC-QUENCHING DEVICE

Title (de)

ELEKTRISCHE SCHALTVORRICHTUNG MIT VERBESSERTER LICHTBOGENLÖSCHEINRICHTUNG

Title (fr)

DISPOSITIF DE COMMUTATION ÉLECTRIQUE ÉQUIPÉE D'UN DISPOSITIF PERFECTIONNÉ D'EXTINCTION D'ARC

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Application

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Abstract (en)

[origin: WO2015144309A1] The present invention relates to an electrical switching apparatus 1, in particular a DC contactor. The switching apparatus has at least one switching point and at least one arc-quenching device assigned to said switching point. The arc-quenching device comprises at least one quenching element and at least one permanent magnet 3 for influencing an arc occurring during the switching operation. The arc is blown by a magnetic field produced by the permanent magnet into the quenching element. In accordance with the invention, provision is made for the at least one permanent magnet to at the same time form the quenching element and to be arranged and polarized in such a way that the arc is attracted by the permanent magnet and, as a result, is sucked onto the permanent magnet and quenched thereby. Preferably, the permanent magnets are in the form of cylindrical bar magnets and are fitted on the switching apparatus 1 by means of a holder 7 that can be clipped on. In a further variant, the permanent magnets consist of hard ferrite. Preferably, the permanent magnets are surrounded by a protective sleeve consisting of ceramic.

IPC 8 full level

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