

Title (en)

DIRECT CURRENT DEVICE FOR ELIMINATING ARCING AND ELECTROMECHANICAL DIRECT CURRENT SWITCHING DEVICE

Title (de)

GLEICHSTROM-LICHTBOGENLÖSCHVORRICHTUNG UND ELEKTROMECHANISCHES GLEICHSTROM-SCHALTGERÄT

Title (fr)

DISPOSITIF D'EXTINCTION D'ARC DE COURANT CONTINU ET APPAREIL DE COMMUTATION DE COURANT CONTINU ÉLECTROMÉCANIQUE

Publication

**EP 3428942 B1 20200701 (DE)**

Application

**EP 18172922 A 20180517**

Priority

DE 102017212033 A 20170713

Abstract (en)

[origin: CN109256291A] The invention relates to a motor-type switch device (1), especially a direct current arc extinction device used for a direct current protection switch. The device is equipped with an arc extinction cavity (20) equipped with multiple arc extinction sheets (21) which are spaced and parrally arranged. The arc extinction device is also equipped with an arc extinction production cavity (30) which is closely arranged ahead of the arc extinction cavity (20). The arc extinction production cavity is equipped with a vertical middle plane (L) pointing towards the arc extinction production cavity and permanent magnets (31) arranged on two sides of the vertical middle plane (L). According to the device, the arc extinction device is equipped with an odd number of permanent magnets (31) with same magnetic property. The permanent magnets (31) arranged on two sides of the arc extinction production cavity (30) along the first direction (R1) orthogonal relative to the vertical middle plane (L) in order to form an asymmetrical magnetic field. The arrangement mode that the permanent magnets (31) are arranged in a line along first direction (R1) achieves a compact structure along the vertical directionof the switch device (1). The compact structure can be closely connected ahead of the arc extinction cavity (20) and applies significant magnetic force (F) to an electric arc (11) located in the arc extinction cavity (20).

IPC 8 full level

**H01H 9/44** (2006.01); **H01H 9/34** (2006.01); **H01H 33/59** (2006.01)

CPC (source: CN EP)

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Cited by

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DOCDB simple family (publication)

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