

Title (en)

ELECTRICAL SWITCH FOR OPENING A CURRENT PATH

Title (de)

ELEKTRISCHER SCHALTER ZUM TRENNEN EINES STROMPFADS

Title (fr)

COMMUTATEUR ÉLECTRIQUE POUR OUVRIR UN TRAJET DE COURANT

Publication

**EP 4010914 A1 20220615 (DE)**

Application

**EP 19759288 A 20190805**

Priority

DE 2019200095 W 20190805

Abstract (en)

[origin: WO2021023325A1] The present invention relates to an electrical switch (100) for opening a current path (102). The switch (100) has a feed line (108) having an opening point (112) for opening the current path (102). At the opening point (112), a switching element (114) movable at least on one side is arranged in the feed line (108) in order to open and/or close the opening point (112). In a closed position, the switching element (114) has, on a movable side, a point of contact (118) with the feed line (108). The switch (100) also has a return line (110), which is electrically connected to the feed line (108) at an end of the feed line (108). A spaced arrangement of the feed line (108) and the return line (110) substantially antiparallel to each other, at least in the region of the opening point (112), is designed to at least partially compensate, by means of a Lorentz force (124) acting on the switching element (114) from the return line (110), a force which, while the current path (102) is carrying current, acts on the switching element (114) as a result of a local Lorentz force in the feed line (108) and in the switching element (114) and/or as a result of a constriction force (122) in the point of contact (118).

IPC 8 full level

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CPC (source: EP)

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See references of WO 2021023325A1

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