

Title (en)

DISCONNECTING DEVICE FOR INTERRUPTING A DIRECT CURRENT OF A CURRENT PATH, AND CIRCUIT BREAKER

Title (de)

TRENNVORRICHTUNG ZUR GLEICHSTROMUNTERBRECHUNG EINES STROMPFADES SOWIE SCHUTZSCHALTER

Title (fr)

DISPOSITIF SÉPARATEUR POUR L'INTERRUPTION DE COURANT CONTINU D'UN CHEMIN DE COURANT ET DISJONCTEUR

Publication

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Application

EP 19726366 A 20190521

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Abstract (en)

[origin: WO2019224198A1] The invention relates to a disconnecting device (14) for interrupting a direct current of a current path (2), in particular for a circuit breaker (8), comprising a hybrid switch (16) which has a current-carrying mechanical contact system (18, 18') and a semiconductor switching system (20) connected in parallel thereto, wherein: the contact system (18, 18') has at least one stationary fixed contact (22a, 22b) and at least one moving contact (24a, 24b); the moving contact (24a, 24b) is mounted on a current-carrying contact bridge (26, 26') which is coupled to a drive system (28, 28') and which moves the moving contact (24a, 24b) in a switching movement from an open position into a closed position resting against the fixed contact (22a, 22b) with a contact force (F_k); and at least one first magnet element (38, 38') is mounted on the contact bridge (26, 26'), said first magnet element being spaced apart from a stationary second magnet element (40, 40') by an air gap (42) such that, when a current flows through the contact bridge (26, 26'), a magnetic field (B) is produced in the first magnet element (38, 38') and the first and second magnet elements (38, 38', 40, 40') are magnetically attracted, said attraction producing a magnetic force (F_m) directed in the same direction as the contact force (F_k).

IPC 8 full level

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