Title (en)

METHOD FOR INCREASING CURRENT LOAD CAPACITY AND FOR ACCELERATING DYNAMIC CONTACT OPENING OF POWER SWITCHES AND ASSOCIATED SWITCHING DEVICE

Title (de)

VERFAHREN ZUR ERHÖHUNG DER STROMTRAGFÄHIGKEIT UND ZUR BESCHLEUNIGUNG DES DYNAMISCHEN KONTAKTÖFFNENS VON LEISTUNGSSCHALTERN UND ZUGEHÖRIGES SCHALTGERÄT

Title (fr)

PROCEDE POUR AUGMENTER L'INTENSITE ADMISSIBLE ET POUR ACCELERER L'OUVERTURE DYNAMIQUE DE CONTACTS D'INTERRUPTEURS DE PUISSANCE, ET APPAREIL DE COMMUTATION ASSOCIE

Publication

EP 1671344 B1 20070228 (DE)

Application

EP 04765135 A 20040913

Priority

- EP 2004010213 W 20040913
- DE 10343005 A 20030917

Abstract (en)

[origin: WO2005034162A1] Disclosed is a power switch comprising a current path, in addition to at least one moving contact and at least one fixed contact. The current path is guided between the moving contact and the fixed contact in the form of a narrow loop. A dynamic contact closing force and a dynamic contact opening force are produced from a flowing electric current in order to improve current load capacity. As a result, the magnetic force on the moving contact can be altered from small flows to a very high flows. Advantages during transition from operation in normal rating to short-circuit operation are produced. In order to produce said dynamic forces, ferromagnetic parts (20, 30; 21, 22; 25, 26, 28, 29) are dimensioned in a suitable manner and are associated with the allocated device of the switching bridge (4) provided with moving contacts (5a, 5b).

IPC 8 full level

H01H 77/10 (2006.01); H01H 1/54 (2006.01)

CPC (source: EP)

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