

Title (en)  
CIRCUIT BREAKER FOR DIRECT CURRENTS

Title (de)  
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Title (fr)  
COMMUTATEUR DE PUISSANCE DESTINÉ À DES COURANTS CONTINUS

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Application  
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Abstract (en)  
[origin: WO2020260673A1] The invention relates to a direct-current high-speed circuit breaker (SSM) which is suitable for and is provided for switching off high direct currents in the event of loading or a short circuit, comprising an isolating switch (VS), a turn-off circuit (LK), and a return conductor (RL), wherein the turn-off circuit (LK) is provided for and is suitable for generating a current in the opposite direction of the direct current to be interrupted, and the return conductor (RL) is provided for and is suitable for discharging direct currents out of the direct-current high-speed circuit breaker (SSM). A first free-wheeling circuit (iFK) is provided in the direct-current high-speed circuit breaker (SSM), said free-wheeling circuit being provided for and being suitable for reducing overvoltages and/or current peaks occurring during the switching process. The invention also relates to a corresponding method for separating a DC circuit in an arc-free manner.

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