

Title (en)

APPARATUS FOR SWITCHING OF DIRECT CURRENT IN A DC NETWORK TERMINAL

Title (de)

VORRICHTUNG ZUM SCHALTEN EINES GLEICHSTROMS IN EINEM POL EINES GLEICHSPANNUNGSNETZES

Title (fr)

APPAREIL POUR COMMUTER D'UN COURANT CONTINU DANS UN TERMINAL D'UN RESEAU D'UN COURANT CONTINU

Publication

**EP 2810290 A1 20141210 (DE)**

Application

**EP 12711811 A 20120309**

Priority

EP 2012054137 W 20120309

Abstract (en)

[origin: WO2013131581A1] The aim of the invention is to turn off fault currents in a DC voltage network reliably and cost-effectively, wherein low losses occur at the same time during normal operation. In order to achieve said aim, a device (1) is provided for switching a direct current in a pole of a DC voltage network, comprising two connection terminals (2, 3) for serial connection to the pole, a main current branch (4) that extends between the connection terminals (2, 3) and in which two mechanical switches (6, 7) are arranged, an auxiliary current branch (5) which extends in a parallel circuit to the main current branch (4) between the connection terminals (2, 3) and in which likewise two mechanical switches (8, 9) and/or two power semiconductors (20, 21) are arranged, a central branch (11) which connects a central branch potential point (10) of the main current path (4), arranged between the mechanical switches (6, 7), to a center branch potential point (12) of the auxiliary current branch (5), arranged between the mechanical switches (8, 9), and which comprises a power switching unit (13). Said power switching unit comprises a series circuit of two-pole submodules (14), each having at least one power semiconductor switch (22) and means for reducing energy (24) which is released during switching, and commutation means (34) for commutating the DC current in the central branch (11) so that the entire direct current is guided via the central branch (11), the commutation means (34) comprising at least one controllable power semiconductor (22, 36).

IPC 8 full level

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CPC (source: EP)

**H01H 9/542** (2013.01); **H01H 33/596** (2013.01); **H01H 2009/544** (2013.01)

Citation (search report)

See references of WO 2013131581A1

Cited by

CN106558864A; US11362512B2

Designated contracting state (EPC)

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BA ME

DOCDB simple family (publication)

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