

Title (en)
DIRECT-CURRENT INTERRUPTION DEVICE

Title (de)
GLEICHSTROMUNTERBRECHUNGSVORRICHTUNG

Title (fr)
DISPOSITIF D'INTERRUPTION DE COURANT CONTINU

Publication
EP 3267460 A1 20180110 (EN)

Application
EP 16758816 A 20160224

Priority
• JP 2015043243 A 20150305
• JP 2016055395 W 20160224

Abstract (en)
A DC breaker 1 includes a mechanical disconnection switch 2 provided at a power transmission line 100, a mechanical circuit breaker 20 connected in series to the mechanical disconnection switch 2, and a parallel circuit 3 connected in parallel with the mechanical disconnection switch 2 and the mechanical circuit breaker 20. The parallel circuit 3 includes a semiconductor circuit breaker 4 that changes a supply or a breaking of the current from the power transmission line 100 to the parallel circuit 3, and a reactor 55 connected in series to the semiconductor circuit breaker 4. An H-bridge circuit 5 which connects one point between the mechanical disconnection switch 2 and the mechanical circuit breaker 20 to one point between the semiconductor circuit breaker 4 and the reactor 55 is provided. The H-bridge circuit 5 includes an H-bridge unit 50 including a plurality of switching elements 51 and a capacitor 53. The H-bridge circuit 5 controls the current flowing through the mechanical circuit breaker 20 by an output voltage control.

IPC 8 full level
H01H 33/59 (2006.01); **H01H 9/54** (2006.01)

CPC (source: EP)
H01H 9/54 (2013.01); **H01H 9/542** (2013.01); **H01H 33/59** (2013.01)

Cited by
CN114365374A; CN110739167A; EP4016574A1; US11574777B2; US11705714B2; EP4016575A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 3267460 A1 20180110; **EP 3267460 A4 20180801**; **EP 3267460 B1 20190626**; JP 2016162713 A 20160905; JP 6430294 B2 20181128; WO 2016140122 A1 20160909

DOCDB simple family (application)
EP 16758816 A 20160224; JP 2015043243 A 20150305; JP 2016055395 W 20160224