

Title (en)
DIRECT-CURRENT SWITCHING DEVICE

Title (de)
GLEICHSTROM-SCHALTEINRICHTUNG

Title (fr)
DISPOSITIF DE COMMUTATION À COURANT CONTINU

Publication
EP 3317891 B1 20191002 (DE)

Application
EP 16751241 A 20160803

Priority
• DE 102015216769 A 20150902
• EP 2016068482 W 20160803

Abstract (en)
[origin: WO2017036710A1] The invention relates to a direct-current switching device (10) for interrupting an electric direct current (I) flowing along a medium- or high-voltage current path (12), comprising an electric circuit assembly (14) which comprises a mechanical switching device (16) that can be switched in the medium- or high-voltage current path (12). The electric circuit assembly (14) further has an LC circuit (22) with at least one inductive component (26, 28) in order to force a current zero crossing in the mechanical switching device (16) connected in the medium- or high-voltage current path, at least one capacitive component (24) for forming a resonant circuit (20) which is closed via the switching device (16), and at least one switchable semiconductor component (38, 40, 60, 62) for generating an excitation frequency which excites the resonant circuit (20). The at least one switchable semiconductor component (38, 40, 60, 62) is arranged in the electric circuit assembly (14) such that the semiconductor component constantly lies outside of the medium- or high-voltage current path (12) when the mechanical switching device (16) is connected in the medium- or high-voltage current path (12).

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

CPC (source: EP US)
H01H 9/547 (2013.01 - US); **H01H 33/596** (2013.01 - EP US)

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

DOCDB simple family (publication)
DE 102015216769 A1 20170302; CN 107924783 A 20180417; EP 3317891 A1 20180509; EP 3317891 B1 20191002;
US 10490365 B2 20191126; US 2018226208 A1 20180809; WO 2017036710 A1 20170309

DOCDB simple family (application)
DE 102015216769 A 20150902; CN 201680050606 A 20160803; EP 16751241 A 20160803; EP 2016068482 W 20160803;
US 201615752970 A 20160803