

Title (en)  
ELECTRIC GRID

Title (de)  
ELEKTRISCHES NETZWERK

Title (fr)  
RÉSEAU ÉLECTRIQUE

Publication  
**EP 3925048 A1 20211222 (DE)**

Application  
**EP 19778838 A 20190913**

Priority  
• CN 2019080553 W 20190329  
• CN 2019080554 W 20190329  
• CN 2019080558 W 20190329  
• EP 2019074545 W 20190913

Abstract (en)  
[origin: WO2020200492A1] The invention relates to a device (100) for opening or closing a DC circuit with at least one busbar (200), comprising:  
- an electric switch (110) for opening or closing the DC circuit, - a fault current detector (120), - a trigger unit (130), and - a precharging device (140), wherein the electric switch (110) opens the DC circuit by means of the trigger unit (130) if a fault current is detected by the fault current detector (120), and the precharging device (140) restores the voltage on the busbar (200) prior to closing the electric switch (110), said device (100) comprising a control unit (150) for automatically closing the electric switch (110) after the pre-charging process.

IPC 8 full level  
**H02J 1/10** (2006.01); **H02H 3/06** (2006.01); **H02H 3/087** (2006.01); **H02H 7/26** (2006.01)

CPC (source: EP US)  
**H01H 9/542** (2013.01 - US); **H01H 33/596** (2013.01 - US); **H02H 1/0007** (2013.01 - US); **H02H 3/087** (2013.01 - US); **H02H 7/1252** (2013.01 - US); **H02H 7/1257** (2013.01 - US); **H02H 7/268** (2013.01 - EP US); **H02H 9/001** (2013.01 - EP US); **H02J 1/10** (2013.01 - EP US); **H02J 1/12** (2013.01 - US); **H01H 2009/544** (2013.01 - US); **H02H 3/087** (2013.01 - EP); **H02H 7/1252** (2013.01 - EP); **H02H 7/1257** (2013.01 - EP)

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)  
**WO 2020200492 A1 20201008**; CN 113892219 A 20220104; CN 114128072 A 20220301; CN 114175436 A 20220311; CN 114207975 A 20220318; CN 114207975 B 20240531; CN 114207976 A 20220318; EP 3925045 A1 20211222; EP 3925046 A1 20211222; EP 3925047 A1 20211222; EP 3925048 A1 20211222; EP 3928405 A1 20211229; US 2022020544 A1 20220120; US 2022166214 A1 20220526; US 2022172914 A1 20220602; US 2022200274 A1 20220623; US 2022200275 A1 20220623; WO 2020200493 A1 20201008; WO 2020200494 A1 20201008; WO 2020200495 A1 20201008; WO 2020200496 A1 20201008

DOCDB simple family (application)  
**EP 2019074539 W 20190913**; CN 201980096927 A 20190913; CN 201980096928 A 20190913; CN 201980096941 A 20190913; CN 201980096957 A 20190913; CN 201980097042 A 20190913; EP 19778834 A 20190913; EP 19778835 A 20190913; EP 19778836 A 20190913; EP 19778837 A 20190913; EP 19778838 A 20190913; EP 2019074541 W 20190913; EP 2019074542 W 20190913; EP 2019074544 W 20190913; EP 2019074545 W 20190913; US 201917599055 A 20190913; US 201917599067 A 20190913; US 201917599076 A 20190913; US 201917599103 A 20190913; US 201917599119 A 20190913