

Title (en)

METHOD AND DEVICE FOR MEASURING AN INSULATION RESISTANCE OF A DC VOLTAGE SOURCE CONNECTED TO A SPLIT INTERMEDIATE CIRCUIT DURING MAINS PARALLEL OPERATION

Title (de)

VERFAHREN UND VORRICHTUNG ZUM ERFASSEN EINES ISOLATIONSWIDERSTANDS EINER AN EINEN GETEILTEN ZWISCHENKREIS ANGESCHLOSSENEN GLEICHSPANNUNGSQUELLE IM NETZPARALLELBETRIEB

Title (fr)

PROCÉDÉ ET DISPOSITIF DE DÉTECTION D'UNE RÉSISTANCE D'ISOLEMENT D'UNE SOURCE DE TENSION CONTINUE CONNECTÉE À UN CIRCUIT INTERMÉDIAIRE DIVISÉ EN FONCTIONNEMENT EN COUPLAGE AVEC LE RÉSEAU

Publication

**EP 4298448 A1 20240103 (DE)**

Application

**EP 22711505 A 20220221**

Priority

- DE 102021104289 A 20210223
- EP 2022054253 W 20220221

Abstract (en)

[origin: WO2022179984A1] To measure an insulation resistance (Riso) of a DC voltage source (7) connected to a split intermediate circuit (2), a midpoint potential of the DC voltage source (7) is shifted by different operation of two voltage controllers (11, 12) by way of which two poles (9, 10) of the DC voltage source (7) are each connected to one of two parts (3, 4) of the split intermediate circuit (2). A change ( $I_{\Delta}$ ), resulting from the shifting of the midpoint potential of the DC voltage source (7), in a difference current over all lines (25, 26; 28, 29) that carry a current flowing via the intermediate circuit (2) from the DC voltage source (7) is measured in the process.

IPC 8 full level

**G01R 27/02** (2006.01); **G01R 27/18** (2006.01); **G01R 31/40** (2020.01); **G01R 31/52** (2020.01); **H02J 3/38** (2006.01); **H02S 50/00** (2014.01)

CPC (source: EP US)

**G01R 27/025** (2013.01 - EP US); **G01R 27/10** (2013.01 - US); **G01R 31/40** (2013.01 - EP US); **H02J 3/381** (2013.01 - EP);  
**H02J 2300/24** (2020.01 - 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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

**DE 102021104289 A1 20220825**; **DE 102021104289 B4 20220908**; CN 116888484 A 20231013; EP 4298448 A1 20240103;  
JP 2024507215 A 20240216; US 2023393179 A1 20231207; WO 2022179984 A1 20220901

DOCDB simple family (application)

**DE 102021104289 A 20210223**; CN 202280016647 A 20220221; EP 2022054253 W 20220221; EP 22711505 A 20220221;  
JP 2023550028 A 20220221; US 202318453599 A 20230822