

Title (en)

DC GRID PROTECTION METHOD AND SYSTEM THEREOF

Title (de)

SCHUTZVERFAHREN FÜR GLEICHSTROMNETZ UND SYSTEM DAFÜR

Title (fr)

PROCÉDÉ DE PROTECTION DE GRILLE À COURANT CONTINU (CC) ET SON SYSTÈME

Publication

**EP 3218978 A4 20180718 (EN)**

Application

**EP 14905956 A 20141113**

Priority

CN 2014091027 W 20141113

Abstract (en)

[origin: WO2016074199A1] A DC grid protection method and system are provided. The method comprises the following steps: fault detecting step (501): acquiring fault component travelling wave current value  $\Delta i$  and fault component travelling wave voltage value  $\Delta u$  of a DC line, wherein forward direction is defined extending from the protection to the DC line; fault determining step (502): if  $\Delta i$  and  $\Delta u$  at fault occurring time meet following criterions, performing fault detection determination step, the criterions include: product of  $\Delta i$  and  $\Delta u$  being less than a forward value which is bigger than zero and is associated with a predetermined threshold; and absolute value of  $\Delta i$  or  $\Delta u$  meeting a sensitivity requirement which is determined by the predetermined threshold; fault direction determination step (503): determining the fault as forward fault. Said scheme can overcome the problem in the prior art and implement the pilot protection in the DC system, especially in the HVDC system.

IPC 8 full level

**H02H 7/26** (2006.01); **G01R 31/08** (2006.01); **H02H 3/42** (2006.01)

CPC (source: EP)

**H02H 7/265** (2013.01); **H02H 7/268** (2013.01); **G01R 31/08** (2013.01); **H02H 3/42** (2013.01); **H02H 7/263** (2013.01)

Citation (search report)

- [I] WO 9750169 A1 19971231 - EXIDE ELECTRONICS CORP [US]
- See references of WO 2016074199A1

Designated contracting state (EPC)

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