

Title (en)
METHOD FOR EARTH FAULT PROTECTION FOR A THREE-PHASE ELECTRICAL NETWORK

Title (de)
VERFAHREN ZUM ERDFEHLERSCHUTZ FÜR EIN DREIPHASIGES ELEKTRISCHES NETZ

Title (fr)
PROCÉDÉ DE PROTECTION CONTRE LES DÉFAUTS DE TERRE POUR RÉSEAU ÉLECTRIQUE TRIPHASÉ

Publication
EP 3304105 A4 20190710 (EN)

Application
EP 16802629 A 20160314

Priority
• FI 20155423 A 20150603
• FI 2016050158 W 20160314

Abstract (en)
[origin: WO2016193529A1] The invention relates to a method in the earth fault protection of a three-phase electrical network. In the method the total current (10) is determined continuously in a measurement point (17) of the electrical network (10). In the method an earth fault (16) is detected, after which the necessary measures are performed. In the method the return current (Ip) caused by the earth fault is determined, which is eliminated from the total current (10). In addition, by elimination from the total current (10) the earth fault current (Is) is determined, from which, on the basis of the location of the earth fault (16) the earthing voltage (Urn) is determined, on the basis of which the earth fault (16) is detected and the necessary measures performed.

IPC 8 full level
G01R 31/02 (2006.01); **G01R 31/08** (2006.01); **H02H 3/347** (2006.01)

CPC (source: EP FI US)
G01R 31/088 (2013.01 - FI); **G01R 31/52** (2020.01 - EP FI US); **H02H 3/347** (2013.01 - EP US); **G01R 31/08** (2013.01 - EP)

Citation (search report)
• [I] EP 0999633 A2 20000510 - ABB SUBSTATION AUTOMATION OY [FI]
• [A] WO 2012171694 A1 20121220 - DLABORATORY SWEDEN AB [SE], et al
• See references of WO 2016193529A1

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 2016193529 A1 20161208; CN 107735690 A 20180223; CN 107735690 B 20210611; EP 3304105 A1 20180411; EP 3304105 A4 20190710; FI 126434 B 20161130; FI 20155423 A 20161130

DOCDB simple family (application)
FI 2016050158 W 20160314; CN 201680038097 A 20160314; EP 16802629 A 20160314; FI 20155423 A 20150603