

Title (en)
POWERING VOLTAGE SOURCE CONVERTERS

Title (de)
STROMVERSORGUNG VON SPANNUNGSQUELLENUMRICHTERN

Title (fr)
ALIMENTATION DE CONVERTISSEURS DE SOURCE DE TENSION

Publication
EP 3289677 A1 20180307 (EN)

Application
EP 16714949 A 20160408

Priority
• GB 201507284 A 20150429
• EP 2016057753 W 20160408

Abstract (en)
[origin: GB2537868A] A voltage source converter (VSC) has one or more switching modules that may form a director switch of a converter arm of the VSC. A power distribution system 200 of the VSC has a power distribution loop 201 and one or more power distribution modules 205 that provide power from the power distribution loop to the switching module(s). A set of one or more floating power supply modules 202 generate an AC current in the power distribution loop. The floating power module(s) derive power from a voltage across one or more components of the VSC (e.g. an energy storage component or one or more semiconductor switches) and are not ground referenced power supplies, avoiding problems of suitable isolation. A ground referenced supply 207 may be removably connected to the power distribution loop to provide power when the VSC is not energised. A power controller may operate in: a single supply mode, to selectively activate a single floating power module with the other floating power modules inactive; or a multiple supply mode, where the power controller selectively activates more than one of the floating power modules. At least one of the floating power modules may be connected in series with, or inductively coupled to, the power distribution loop when active.

IPC 8 full level
H02M 7/483 (2007.01); **H02J 3/00** (2006.01); **H02M 1/00** (2007.01)

CPC (source: EP GB US)
H02J 3/36 (2013.01 - EP); **H02M 3/22** (2013.01 - GB); **H02M 7/483** (2013.01 - EP GB US); **H02M 7/4835** (2021.05 - EP US); **H02M 1/0006** (2021.05 - EP); **H02M 1/0095** (2021.05 - EP US); **Y02E 60/60** (2013.01 - EP)

Citation (search report)
See references of WO 2016173825A1

Designated contracting state (EPC)
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Designated extension state (EPC)
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