

Title (en)
DC TO DC CONVERTER ASSEMBLY

Title (de)
GLEICHSTROM/GLEICHSTROM-WANDLERANORDNUNG

Title (fr)
ENSEMBLE CONVERTISSEUR COURANT CONTINU (CC)-COURANT CONTINU (CC)

Publication
EP 3020126 A2 20160518 (EN)

Application
EP 14739378 A 20140708

Priority
• GB 201312376 A 20130710
• EP 2014064574 W 20140708

Abstract (en)
[origin: GB2516068A] A DC to DC converter assembly 20 for interconnecting DC electrical networks 32, 34 comprises first and second converters 22, 24 and an AC transmission link 56. Each converter includes first and second DC terminals 26, 28 for connection to a respective one of the DC electrical networks, a converter limb 30 extending between the corresponding first and second DC terminals) and having a pair of first limb portions 36a, 36b, 38a, 38b separated by an AC terminal 40, 42. Each limb portion includes at least one switching element 44 and a plurality of series connected modules 46a, 46b, each comprising two pairs of switching elements and a storage element. An AC transmission link 56 connects the first and second AC terminals. A controller 65 controls switching of the switching element in each limb portion to control the configuration of the AC voltage 66, 68 at the corresponding AC terminal to form a current circulation path that includes the AC transmission link, at least one first limb portion 36a, 36b and at least one second limb portion 38a, 38b, and inject a circulation current into the current circulation path to transfer energy between at least one first module and at least one second module in the circulation path.

IPC 8 full level
H02M 3/335 (2006.01); **H02M 7/483** (2007.01)

CPC (source: EP GB US)
H02M 3/335 (2013.01 - GB); **H02M 3/33569** (2013.01 - GB); **H02M 3/33584** (2013.01 - EP GB US); **H02M 7/4835** (2021.05 - EP US); **H02M 1/0095** (2021.05 - EP US)

Citation (search report)
See references of WO 2015004120A2

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)
GB 201312376 D0 20130821; **GB 2516068 A 20150114**; **GB 2516068 B 20151118**; EP 3020126 A2 20160518; WO 2015004120 A2 20150115; WO 2015004120 A3 20150514

DOCDB simple family (application)
GB 201312376 A 20130710; EP 14739378 A 20140708; EP 2014064574 W 20140708