

Title (en)  
DC TO DC CONVERTER ASSEMBLY

Title (de)  
GLEICHSTROM/GLEICHSTROM-WANDLERANORDNUNG

Title (fr)  
ENSEMBLE CONVERTISSEUR COURANT CONTINU -COURANT CONTINU

Publication  
**EP 3063864 A1 20160907 (EN)**

Application  
**EP 14789308 A 20141028**

Priority  
• GB 201319057 A 20131029  
• EP 2014073154 W 20141028

Abstract (en)  
[origin: GB2519762A] 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, and 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 at least one switching element 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 module so as to transfer energy between at least one first module and at least one second module. The controller is further configured to selectively control switching of the switching element in each limb portion to control the configuration of the AC voltage at the corresponding AC terminal so as to minimise a net change in energy level of the DC to DC converter assembly during a transfer of energy between at least one first module and at least one second module.

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

CPC (source: EP GB US)  
**H02M 3/335** (2013.01 - EP US); **H02M 3/33584** (2013.01 - EP GB); **H02M 7/483** (2013.01 - EP US); **H02M 7/4835** (2021.05 - EP US); **H02M 1/0095** (2021.05 - EP US)

Citation (search report)  
See references of WO 2015063108A1

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 201319057 D0 20131211**; **GB 2519762 A 20150506**; **GB 2519762 B 20160601**; EP 3063864 A1 20160907; WO 2015063108 A1 20150507

DOCDB simple family (application)  
**GB 201319057 A 20131029**; EP 14789308 A 20141028; EP 2014073154 W 20141028