

Title (en)  
DC TO DC CONVERTER

Title (de)  
GLEICHSPANNUNGSWANDLER

Title (fr)  
CONVERTISSEUR CONTINU-CONTINU

Publication  
**EP 3245723 A1 20171122 (DE)**

Application  
**EP 15707941 A 20150304**

Priority  
EP 2015054483 W 20150304

Abstract (en)  
[origin: WO2016138949A1] The invention relates to a DC to DC converter (100) comprising a converter branch (14) which extends between high-voltage-side DC voltage poles (12, 13) and has a first and a second converter arm (15, 16), which converter arms are electrically connected at a potential point (19) which is connected to a first low-voltage-side DC voltage pole (21), wherein the second converter arm (16) extends between the potential point between the converter arms and a second low-voltage-side DC voltage pole (20), and each of the converter arms has a power semiconductor switch which can be switched on and off, and also comprising an energy exchange branch (14) for energy exchange between the two converter arms, which energy exchange branch extends between the high-voltage-side DC voltage poles parallel to the converter branch. The invention is characterized by a converter module (25) comprising a series circuit of two-pole submodules (26), which converter module is arranged between the potential point between the two converter arms and the first low-voltage-side DC voltage pole, wherein the submodules have an energy store and also at least one power semiconductor switch and can be driven in such a way that a positive or negative submodule voltage or a voltage with the value zero is dropped across the poles of the submodules.

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**H02M 3/158** (2013.01 - EP US); **H02M 7/4835** (2021.05 - EP US)

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Citation (examination)  
EP 2494687 A1 20120905 - ALSTOM TECHNOLOGY LTD [CH]

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