

Title (en)  
BIDIRECTIONAL DC-TO-DC CONVERTER

Title (de)  
BIDIREKTIONALER GLEICHSPANNUNGSWANDLER

Title (fr)  
CONVERTISSEUR CONTINU-CONTINU BIDIRECTIONNEL

Publication  
**EP 3286827 A1 20180228 (DE)**

Application  
**EP 16718342 A 20160422**

Priority  
• DE 102015207607 A 20150424  
• EP 2016059049 W 20160422

Abstract (en)  
[origin: WO2016170136A1] The invention relates to a bidirectional DC-to-DC converter (1) having the following: a first half-bridge circuit (2); a second half-bridge circuit (3); at least one transformer (4) having a first primary coil (4a), a second primary coil (4b), and at least one secondary coil (4c, 4d), wherein the first half-bridge circuit (2) is designed to generate an AC voltage at the first primary coil (4a), and the second half-bridge circuit (3) is designed to generate an AC voltage at the second primary coil (4b); and at least one bidirectional power converter circuit (5, 5a, 5b), which is electrically coupled to the secondary coil, in a bridge arrangement. The bridge arrangement has a first bridge connection pole (6) and a second bridge connection pole (7), said power converter circuit (5) having a voltage-limiting device (8) with a switching element (M9).

IPC 8 full level  
**H02M 1/32** (2007.01); **H02M 3/28** (2006.01); **H02M 3/335** (2006.01)

CPC (source: EP US)  
**H02M 1/32** (2013.01 - EP US); **H02M 3/285** (2013.01 - EP US); **H02M 3/33584** (2013.01 - EP US); **H02M 3/33592** (2013.01 - US); **H02M 1/342** (2021.05 - EP); **Y02B 70/10** (2013.01 - EP)

Citation (search report)  
See references of WO 2016170136A1

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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)  
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