

Title (en)  
INVERTER WITH INTERMEDIATE CIRCUIT CAPACITOR CASCADE AND DC-SIDE COMMON-MODE AND DIFFERENTIAL-MODE FILTERS

Title (de)  
WECHSELRICHTER MIT ZWISCHENKREISKONDENSATORKASKADE SOWIE DC-SEITIGEN GLEICHTAKT- UND GEGENTAKTFILTERN

Title (fr)  
ONDULEUR COMPRENANT DES CONDENSATEURS DE CIRCUIT INTERMÉDIAIRE EN CASCADE AINSI QUE DES FILTRES EN MODE COMMUN ET DES FILTRES EN MODE DIFFÉRENTIEL CÔTÉ CC

Publication  
**EP 3625881 A1 20200325 (DE)**

Application  
**EP 18728055 A 20180515**

Priority  
• DE 102017110608 A 20170516  
• EP 2018062602 W 20180515

Abstract (en)  
[origin: WO2018210869A1] The invention relates to an inverter (1) having an intermediate circuit capacitor, the terminals of which are connected to supply lines (3, 4) for power supply and to a switching device (10) comprising a plurality of half-bridges (13), wherein the intermediate circuit capacitor has a predefined intermediate circuit capacitance (C), the magnitude of which is such that a ripple voltage formed in the supply lines (3, 4) by switching operations in the switching device (10) under predefined operating conditions is reduced to a predefined maximum ripple voltage. In order to reduce differential-mode interference, it is proposed according to the invention that a plurality of parallel-connected intermediate circuit capacitors (11, 12) are provided, wherein the sum of the capacitances (C1, C2) of the plurality of intermediate circuit capacitors (11, 12) corresponds to the intermediate circuit capacitance (C).

IPC 8 full level  
**H02M 1/14** (2006.01); **H02M 1/44** (2007.01); **H02M 7/5387** (2007.01); **H02M 7/5395** (2006.01); **H02M 7/797** (2006.01); **H02P 27/08** (2006.01)

CPC (source: EP US)  
**H02M 1/14** (2013.01 - EP US); **H02M 1/44** (2013.01 - US); **H02M 7/53871** (2013.01 - US); **H02M 7/797** (2013.01 - EP); **H02M 1/44** (2013.01 - EP); **H02M 7/5387** (2013.01 - EP); **H02M 7/5395** (2013.01 - EP); **H02P 27/08** (2013.01 - EP)

Citation (examination)  
• DE 102010041533 A1 20120329 - ZF LENKSYSTEME GMBH [DE]  
• KR 20170006269 A 20170117 - TOYOTA JIDOSHOKKI KK [JP]  
• See also references of WO 2018210869A1

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DOCDB simple family (publication)  
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