

Title (en)  
PUMP DEVICE FOR DRIVING BLOW-BY GAS

Title (de)  
PUMPVORRICHTUNG ZUM ANTREIBEN VON BLOW-BY-GAS

Title (fr)  
DISPOSITIF DE POMPAGE POUR L'ENTRAÎNEMENT DE GAZ DE BLOW-BY

Publication  
**EP 3259459 A1 20171227 (DE)**

Application  
**EP 16703942 A 20160203**

Priority  
• DE 102015202946 A 20150218  
• EP 2016052280 W 20160203

Abstract (en)  
[origin: WO2016131654A1] The invention relates to a pump device for driving blow-by gas (32) in a crankcase ventilation apparatus (10) comprising a side channel compressor (20) having a housing (44) which has a conveying chamber (46), a liquid inlet (48), and a liquid outlet (50), having an impeller (52) which has blades (56) on the radial outside and which is rotatably mounted in the housing (44), wherein the blades (56) are in the conveying chamber (46), having a shaft (58), which is rotatably mounted about a rotation axis (60) and to which the impeller (52) is held to the shaft (58) in a rotationally fixed manner, wherein the conveying chamber (46) has at least one side channel (62, 64, 66) which extends axially adjacent to the blades (56) and connects the liquid inlet (48) and the liquid outlet (50) to each other.

IPC 8 full level  
**F01M 13/00** (2006.01); **F01M 13/02** (2006.01)

CPC (source: EP US)  
**B01D 45/08** (2013.01 - US); **F01M 11/0004** (2013.01 - US); **F01M 13/02** (2013.01 - EP US); **F01M 13/021** (2013.01 - US);  
**F01M 13/04** (2013.01 - US); **F04D 23/008** (2013.01 - EP US); **F04D 25/04** (2013.01 - EP); **F04D 25/045** (2013.01 - US);  
**F04D 29/284** (2013.01 - US); **F04D 29/706** (2013.01 - EP US); **F01M 2013/026** (2013.01 - EP US); **F01M 2013/0427** (2013.01 - US)

Citation (search report)  
See references of WO 2016131654A1

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)  
**DE 102015202946 A1 20160818**; CN 108026805 A 20180511; CN 108026805 B 20190409; EP 3259459 A1 20171227;  
JP 2018505988 A 20180301; JP 6297760 B2 20180320; US 10253662 B2 20190409; US 2018030868 A1 20180201;  
WO 2016131654 A1 20160825

DOCDB simple family (application)  
**DE 102015202946 A 20150218**; CN 201680006340 A 20160203; EP 16703942 A 20160203; EP 2016052280 W 20160203;  
JP 2017541909 A 20160203; US 201615551902 A 20160203