

Title (en)  
SPLIT FLOW VACUUM PUMP AND VACUUM SYSTEM WITH A SPLIT FLOW VACUUM PUMP

Title (de)  
SPLITFLOW-VAKUUMPUMPE SOWIE VAKUUM-SYSTEM MIT EINER SPLITFLOW-VAKUUMPUMPE

Title (fr)  
POMPE À VIDE À DÉBIT PARTAGÉ ET SYSTÈME À VIDE DOTÉ D'UNE POMPE À DÉBIT PARTAGÉ

Publication  
**EP 3112688 B2 20220511 (DE)**

Application  
**EP 15174844 A 20150701**

Priority  
EP 15174844 A 20150701

Abstract (en)  
[origin: JP2017020502A] PROBLEM TO BE SOLVED: To provide a split flow vacuum pump capable of increasing a number of inlets without increasing a number of disposed pump stages.SOLUTION: A split flow vacuum pump has at least three radial inlets and at least four pump stages, where at least one pump stage is formed as a turbo molecular pump stage, and at least three inlets are formed as main inlets and axially disposed between the pump stages. Additionally, at least one radial sub-inlet (27, 28, 52) is disposed, and the sub-inlet is disposed in a region of the at least one turbo molecular pump stage (21, 22, 44, 45, 46).SELECTED DRAWING: Figure 1

IPC 8 full level  
**F04D 19/04** (2006.01); **F04D 29/053** (2006.01); **F04D 29/52** (2006.01); **F04D 29/58** (2006.01)

CPC (source: EP)  
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Citation (opposition)  
Opponent :  
• US 2009092484 A1 20090409 - ZIPP ANDEAS [DE]  
• WO 2014173961 A1 20141030 - OERLIKON LEYBOLD VACUUM GMBH [DE]  
• US 2015056060 A1 20150226 - MAKAROV ALEXANDER [DE], et al

Cited by  
CN106678058A; EP3441617A1; GB2604382A; EP3767109A1; US11037773B2

Designated contracting state (EPC)  
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**EP 15174844 A 20150701**; JP 2016128671 A 20160629