

Title (en)  
FLANGE CONNECTION FOR VACUUM PUMPS

Title (de)  
FLANSCHVERBINDUNG FÜR VAKUUMPUMPEN

Title (fr)  
RACCORD À BRIDE POUR POMPES À VIDE

Publication  
**EP 3865658 A1 20210818 (EN)**

Application  
**EP 20382106 A 20200213**

Priority  
EP 20382106 A 20200213

Abstract (en)  
A flange connection for mounting vacuum pumps comprising an upper body configured to receive at least two stators that create pump chambers in which respective rotors are to be housed. The flange connection further comprises a lower body configured to receive a motor of each vacuum pump, at least one inlet port for sucking air from a device where pressure is aimed to be lowered and at least one duct housed in the flange connection that is in fluid communication with the at least one inlet port. The upper body further comprises a respective inlet hole fluidly communicable with each pump chamber and being in fluid communication with the at least one duct. The at least one duct comprises flow control means configured to selectively let air pass from the at least one inlet port towards at least one of the pump chambers.

IPC 8 full level  
**F01C 21/00** (2006.01); **F04C 23/00** (2006.01); **F04C 25/02** (2006.01); **F04C 28/02** (2006.01); **F04C 29/12** (2006.01)

CPC (source: CN EP)  
**F01C 21/007** (2013.01 - EP); **F04B 37/14** (2013.01 - CN); **F04B 39/10** (2013.01 - CN); **F04B 39/123** (2013.01 - CN); **F04B 39/14** (2013.01 - CN); **F04C 23/001** (2013.01 - EP); **F04C 25/02** (2013.01 - EP); **F04C 28/02** (2013.01 - EP); **F04C 29/12** (2013.01 - EP); **F04C 2210/10** (2013.01 - EP); **F04C 2230/604** (2013.01 - EP); **F04C 2240/30** (2013.01 - EP); **F04C 2240/70** (2013.01 - EP)

Citation (search report)  
• [A] CN 206035815 U 20170322 - HANGZHOU SIKETE ELECTROMECHANICAL CO LTD  
• [A] US 2014161640 A1 20140612 - GEUE INGO [DE], et al  
• [A] US 2007122298 A1 20070531 - LESTHER NICAISE [FR], et al  
• [A] CN 110466490 A 20191119 - UNIV SHANDONG TECHNOLOGY

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)  
**EP 3865658 A1 20210818**; **EP 3865658 B1 20231220**; **EP 3865658 C0 20231220**; CN 113250934 A 20210813; ES 2969297 T3 20240517

DOCDB simple family (application)  
**EP 20382106 A 20200213**; CN 202110079317 A 20210121; ES 20382106 T 20200213