

Title (en)  
SCROLL PUMP AND METHOD FOR OPERATING A SCROLL PUMP

Title (de)  
SCROLLPUMPE UND VERFAHREN ZUM BETREIBEN EINER SCROLLPUMPE

Title (fr)  
POMPE A SPIRALES ET PROCEDE DESTINE AU FONCTIONNEMENT D'UNE POMPE A SPIRALES

Publication  
**EP 3153708 B1 20190717 (DE)**

Application  
**EP 15188515 A 20151006**

Priority  
EP 15188515 A 20151006

Abstract (en)  
[origin: JP2017072137A] PROBLEM TO BE SOLVED: To provide a scroll pump having an improved electric drive portion.SOLUTION: A scroll pump, in particular, a scroll vacuum pump has at least one scroll pump stage (19) for transporting a gas from a gas inlet (15) to a gas outlet (17) through the scroll pump stage (19), and an electric motor (53) having a stator (55) and a rotor (57), and the rotor (57) is connected to a movable part (21) of the scroll pump stage (19) to drive the movable part (21) of the scroll pump stage (19). A transmission motor (53) is a synchronous motor.SELECTED DRAWING: Figure 1

IPC 8 full level  
**F04C 23/00** (2006.01); **F04C 15/00** (2006.01); **F04C 18/02** (2006.01); **F04C 25/02** (2006.01); **F04C 29/00** (2006.01)

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**F04C 15/008** (2013.01); **F04C 18/0215** (2013.01); **F04C 23/008** (2013.01); **F04C 25/02** (2013.01); **F04C 29/0021** (2013.01); **F04C 2240/40** (2013.01); **F04C 2270/0525** (2013.01)

Citation (examination)  
WO 0238960 A1 20020516 - EBARA CORP [JP], et al

Citation (opposition)  
Opponent : EDWARDS LIMITED,  
• US 2014271233 A1 20140918 - CALHOUN JOHN [US], et al  
• WO 03100258 A1 20031204 - LEYBOLD VAKUUM GMBH [DE], et al  
• JP 2008298006 A 20081211 - NABTESCO CORP  
• WO 2010021019 A1 20100225 - RICHSTONE LTD [JP], et al  
• EP 1101943 A2 20010523 - ANEST IWATA CORP [JP]  
• WO 2011061429 A2 20110526 - ALCATEL LUCENT [FR], et al  
• US 6739840 B2 20040525 - CURRY MARK WILLIAM [US], et al  
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• DE 202015005199 U1 20150818 - VACUUBRAND GMBH & CO KG [DE]  
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• US 6050918 A 20000418 - KURAMOTO HIROAKI [JP]  
• EP 0664603 A1 19950726 - MICROPUMP CORP [US]  
• US 4664601 A 19870512 - UCHIDA RIICHI [JP], et al

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US11773849B2; US2021102536A1; WO2022090191A1; EP4219947A2; EP4234932A2; EP4253720A2; EP3647599B1

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DOCDB simple family (application)  
**EP 15188515 A 20151006**; EP 19158257 A 20151006; JP 2016196996 A 20161005