

Title (en)  
PISTON COMPRESSOR AND METHOD FOR OPERATING SAME

Title (de)  
KOLBENVERDICHTER UND VERFAHREN ZUM BETRIEB DESSELBEN

Title (fr)  
COMPRESSEUR À PISTON ET SON PROCÉDÉ DE FONCTIONNEMENT

Publication  
**EP 4048891 A1 20220831 (DE)**

Application  
**EP 20807665 A 20201021**

Priority

- EP 19204408 A 20191021
- EP 2020079589 W 20201021

Abstract (en)  
[origin: WO2021078781A1] The piston compressor (1) for compressing a gas comprises a cylinder (2) and also comprises a piston (3), a piston rod (16), packing (12), a crosshead (17) and a drive (21), wherein: the piston (3) is disposed for movement in a longitudinal direction (L) inside the cylinder (2); the piston (3) is connected to the crosshead (17) by means of a piston rod (16); packing (12) is disposed between the piston (3) and the crosshead (17), through which packing the piston rod runs (16); the crosshead (17) is driven by the drive (21); in addition an activatable magnetic bearing (13) is disposed between the piston (3) and the crosshead (17); the magnetic bearing (13) can generate a magnetic force (Fm) on the piston rod (16), at least perpendicularly to the longitudinal direction (L); and an activation device (22) activates the magnetic force (Fm) generated by the magnetic bearing (13) on the piston rod (16).

IPC 8 full level  
**F04B 9/04** (2006.01); **F04B 35/01** (2006.01); **F04B 39/00** (2006.01); **F04B 39/04** (2006.01); **F04B 39/12** (2006.01)

CPC (source: CN EP KR US)  
**F04B 9/045** (2013.01 - US); **F04B 35/01** (2013.01 - CN EP KR US); **F04B 39/0005** (2013.01 - CN EP KR); **F04B 39/0022** (2013.01 - US); **F04B 39/0094** (2013.01 - KR); **F04B 39/041** (2013.01 - CN EP KR US); **F04B 39/042** (2013.01 - US); **F04B 39/121** (2013.01 - CN EP KR); **F04B 39/122** (2013.01 - KR US); **F04B 49/06** (2013.01 - US); **F04B 53/08** (2013.01 - US)

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 3812582 A1 20210428**; CN 114787510 A 20220722; CN 114829771 A 20220729; EP 4048891 A1 20220831; EP 4048892 A1 20220831; JP 2023501892 A 20230120; JP 2023501893 A 20230120; KR 20220079993 A 20220614; KR 20220079997 A 20220614; US 2022372962 A1 20221124; US 2022372963 A1 20221124; WO 2021078781 A1 20210429; WO 2021078820 A1 20210429

DOCDB simple family (application)  
**EP 19204408 A 20191021**; CN 202080073263 A 20201021; CN 202080073290 A 20201021; EP 2020079589 W 20201021; EP 2020079673 W 20201021; EP 20790173 A 20201021; EP 20807665 A 20201021; JP 2022523398 A 20201021; JP 2022523399 A 20201021; KR 20227016882 A 20201021; KR 20227017080 A 20201021; US 202017770832 A 20201021; US 202017770839 A 20201021