

Title (en)  
RECIPROCATING PISTON MOTOR COMPRISING A SLIDING SLEEVE

Title (de)  
HUBKOLBENMASCHINE MIT EINER SCHIEBEHÜLSE

Title (fr)  
MOTEUR A PISTON ALTERNATIF A MANCHON COULISSANT

Publication  
**EP 1438504 B1 20111026 (DE)**

Application  
**EP 02704758 A 20020315**

Priority  
• DE 10124033 A 20010516  
• EP 0202891 W 20020315

Abstract (en)  
[origin: WO02093010A2] The invention relates to a reciprocating piston motor, particularly a refrigerant compressor (1) for a motor vehicle air-conditioner. Said reciprocating piston motor comprises a motor shaft (2), a number of pistons (4), which are mounted inside a motor casing (3) in a circular manner around the motor shaft (2), and comprises a circular swash plate (5), which is driven by the motor shaft (2) and which acts upon the pistons via a linkage assembly (6). The swash plate is connected in an articulated manner to the motor shaft via a driver (7) provided for transferring the drive forces, and the swash plate is mounted on a sliding body (9) in a manner that permits it to pivot about a hinge axis (8) oriented perpendicular to the motor shaft. According to the invention, the sliding body (9) has a recess (9a), which is open toward the rotation axis (11) of the motor shaft and which at least partially encompasses the driver (7) and/or the sliding body (9), on its inner surface facing the motor shaft (2), encloses a cavity (17) inside of which a discharge line (24, 25) passing through the motor shaft (2) leads. The reciprocating piston motor is to be used in refrigerant compressors for motor vehicles.

IPC 8 full level  
**F04B 1/00** (2006.01); **F04B 27/08** (2006.01); **F04B 27/10** (2006.01)

CPC (source: EP KR US)  
**F04B 27/08** (2013.01 - KR); **F04B 27/1072** (2013.01 - EP US)

Cited by  
WO2015090880A1

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)  
**WO 02093010 A2 20021121; WO 02093010 A3 20040527**; AT E530767 T1 20111115; AU 2002238586 A1 20021125; CN 100359166 C 20080102; CN 1617980 A 20050518; DE 10124033 A1 20021121; DE 10124033 B4 20090820; EP 1438504 A2 20040721; EP 1438504 B1 20111026; EP 1438504 B8 20120229; JP 2004534919 A 20041118; JP 4060193 B2 20080312; KR 100875343 B1 20081222; KR 20040012839 A 20040211; US 2004120830 A1 20040624; US 7179063 B2 20070220

DOCDB simple family (application)  
**EP 0202891 W 20020315**; AT 02704758 T 20020315; AU 2002238586 A 20020315; CN 02809914 A 20020315; DE 10124033 A 20010516; EP 02704758 A 20020315; JP 2002590249 A 20020315; KR 20037014932 A 20031117; US 71355803 A 20031114