

Title (en)  
Dry-running reciprocating compressor

Title (de)  
Trockenlaufender Kolbenverdichter

Title (fr)  
Compresseur à piston à fonctionnement à sec

Publication  
**EP 1674726 A1 20060628 (DE)**

Application  
**EP 04029955 A 20041217**

Priority  
EP 04029955 A 20041217

Abstract (en)  
The compressor has a cylinder with a piston that is connected with a crankshaft by a piston rod. The crankshaft side end of the rod is supported at the crankshaft by a big end bearing (9) having a load ratio within the range of 2 to 6. The ratio is obtained from  $C_{dyn}/(A \cdot p_{comp})$  (A pistonxp compressor), where C<sub>dyn</sub> refers to the dynamic bearing load rating, A piston is the piston surface area and p<sub>comp</sub> compressor is the nominal operating pressure. An independent claim is also included for a commercial vehicle with a dry run piston compressor.

IPC 8 full level  
**F04B 39/00** (2006.01); **B60T 17/02** (2006.01)

CPC (source: EP)  
**F04B 39/0005** (2013.01); **F04B 39/0022** (2013.01)

Citation (search report)  
• [DX] DE 10109514 C1 20020711 - KNORR BREMSE SYSTEME [DE]  
• [X] DE 10042212 A1 20020314 - KNORR BREMSE SYSTEME [DE]  
• [X] US 2003180161 A1 20030925 - HSIAO I-MIN [TW]  
• [X] US 5152677 A 19921006 - BAUER HEINZ [DE], et al

Citation (third parties)  
Third party :  
ESCHMANN P.: "Die Waelzlagerpraxis - Hanbuch für die Berechnung und Gestaltung von Lagerungen", 1978, R. OLDENBOURG VERLAG GMBH, MUENCHEN, ISBN: 3-486-31102-6, pages: 425 - 427, XP003000105

Cited by  
CN112240275A

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**EP 1674726 A1 20060628**; CA 2591491 A1 20060629; CN 101111678 A 20080123; JP 2008524483 A 20080710; MX 2007007237 A 20070814; WO 2006066833 A1 20060629

DOCDB simple family (application)  
**EP 04029955 A 20041217**; CA 2591491 A 20051216; CN 200580047263 A 20051216; EP 2005013607 W 20051216; JP 2007545969 A 20051216; MX 2007007237 A 20051216