Title (en)
Piston for a piston compressor

Title (de)
Kolben für einen Kolbenverdichter

Title (fr)
Piston pour un compresseur à piston

Publication
EP 0980977 A2 20000223 (DE)

Application
EP 99116360 A 19990819

Priority
DE 29814962 U 19980820

Abstract (en)
There is a reciprocating connecting-rod (14) inside a cylinder (12), with the connecting-rod being connected to a piston (10). The piston has a valve washer (16) with at least one through-let (18) for to-be-sucked gaseous medium, on the piston's underside, and a ring-shaped piston head (20) made from plastics. The piston head may have a sealed support ring (22) on its ring inner side that is made from metal or a metal alloy. The coefficient of friction of both the support ring material and the cylinder material are approximately the same. The support ring may be made from brass and may have a tapered-off bevel (24,26). The valve washer may extend through a central ring opening of the piston head, e.g. the support ring.

Abstract (de)
Die vorliegende Erfindung betrifft einen Kolben für einen Kolbenverdichter für gasförmige Medien mit einem innerhalb eines Zylinders (12) hin- und herbewegbaren Pleuel (14), wobei das Pleuel (14) mit dem Kolben (10) verbunden ist und der Kolben (10) einen Ventilteller (16) mit mindestens einem Durchlaß (18) für das von der Kolbenunterseite anzusaugende gasförmige Medium und einen ringförmigen Kolbenkopf (20) aus Kunststoff aufweist, wobei der Kolbenkopf (20) an seiner Ringinnenseite einen geschlossenen Stützring (22) aus Metall oder einer Metallegierung aufweist, wobei die Ausdehnungskoeffizienten des Stützringmaterials und des Zylindermaterials ungefähr gleich sind. <IMAGE>

IPC 1-7 (main, further and additional classification)
F04B 39/00

IPC 8 full level (invention and additional information)
F04B 39/00 (2006.01)

CPC (invention and additional information)
F04B 39/0016 (2013.01); F05C 2201/0475 (2013.01)

Cited by
AT414270B; AT414269B; DE20106700U1; WO2004011804A1

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

EPO simple patent family
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2000-10-11 [AX] REQUEST FOR EXTENSION OF THE EUROPEAN PATENT TO:
- Free text : AL;LT;LV;MK;RO;SI

2000-03-08 [RIN1] INVENTOR CHANGED BEFORE GRANT
- Inventor name : THURNER, HELMUT

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