

Title (en)

COMPRESSOR WITH AXIALLY DRIVEN PISTON-CYLINDER UNIT

Title (de)

KOMPRESSOR MIT AXIAL ANGETRIEBENER KOLBEN-ZYLINDER-EINHEIT

Title (fr)

COMPRESSEUR AVEC UNITE PISTON-CYLINDRE A ENTRAINEMENT AXIAL

Publication

EP 1838963 A1 20071003 (DE)

Application

EP 06701389 A 20060111

Priority

- EP 2006000191 W 20060111
- DE 102005001470 A 20050112

Abstract (en)

[origin: WO2006074915A1] The invention relates to an axially driven piston-cylinder unit comprising a cylinder (2), a piston (3) that can be moved back and forth in the axial direction of the cylinder (2), between a first piston position wherein the cylinder volume (18) defined by the piston (3) and the cylinder (2) is maximal, and a second piston position wherein the cylinder volume is minimal, and a drive element (50) that can be moved back and forth in the axial direction of the cylinder and is mechanically connected to the piston (3) by means of a piston rod (4). The invention is characterised in that the piston rod (4) is connected, on the first end (4') thereof and/or on the second end (4'') thereof, to the piston (3) or to the drive element (50), by means of an elastic device (6), against the pretension of the elastic device, in such a way that it can be moved axially in relation to the piston (3) or the drive element (50), such that when the piston head (16) comes into contact with the front wall (12) of the cylinder borehole (10), on the side of the cylinder head, the other movement of the drive element (50) is performed against the force of the elastic device (6), thus braking the drive element (50).

IPC 8 full level

F04B 39/00 (2006.01); **F02G 1/043** (2006.01); **F04B 35/04** (2006.01)

CPC (source: EP KR US)

F02G 1/043 (2013.01 - KR); **F02G 1/0435** (2013.01 - EP US); **F04B 35/04** (2013.01 - EP KR US); **F04B 35/045** (2013.01 - EP US); **F04B 39/00** (2013.01 - KR); **F04B 39/0005** (2013.01 - EP US); **F04B 39/0022** (2013.01 - EP US)

Citation (search report)

See references of WO 2006074915A1

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 LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

DE 102005001470 B3 20060720; CN 101103199 A 20080109; CN 101103199 B 20110323; EP 1838963 A1 20071003; EP 1838963 B1 20150708; JP 2008527271 A 20080724; KR 20070106998 A 20071106; RU 2007124544 A 20090220; RU 2371609 C2 20091027; US 2008118375 A1 20080522; WO 2006074915 A1 20060720

DOCDB simple family (application)

DE 102005001470 A 20050112; CN 200680002162 A 20060111; EP 06701389 A 20060111; EP 2006000191 W 20060111; JP 2007550748 A 20060111; KR 20077015877 A 20070712; RU 2007124544 A 20060111; US 79509306 A 20060111