

Title (en)
LINEAR COMPRESSOR AND THE SUPPORTER FOR THE SAME

Title (de)
LINEARER KOMPRESSOR UND STÜTZE DAFÜR

Title (fr)
COMPRESSEUR LINEAIRE ET SUPPORT ASSOCIE

Publication
EP 1937969 A4 20140521 (EN)

Application
EP 06799135 A 20061009

Priority
• KR 2006004055 W 20061009
• KR 20050097632 A 20051017

Abstract (en)
[origin: WO2007046592A1] The present invention relates to a linear compressor compressing a working fluid in the cylinder such as a refrigerant and etc with the reciprocating movement of the piston in the cylinder due to the reciprocating force of the linear motor, and provides a linear compressor and the supporter for the same that the change of the lateral resonance frequency due to the lateral stiffness of the piston spring is easy as having a stub or a narrow part on the supporter preventing the increase of the mass inertia moment compared with the distance between the centroid of the supporter and the center of the piston spring sat on the supporter arm of the supporter, and capable of reducing the entire size and the manufacturing costs as raising the lateral resonance frequency easily without extending the length of the supporter arm.

IPC 8 full level
F04B 17/04 (2006.01); **F04B 35/04** (2006.01); **F04B 39/00** (2006.01)

CPC (source: EP KR US)
F04B 17/04 (2013.01 - KR); **F04B 35/04** (2013.01 - KR); **F04B 35/045** (2013.01 - EP US); **F04B 39/0044** (2013.01 - EP US)

Citation (search report)
• [X] US 2005142008 A1 20050630 - JUNG CHOONG-MIN [KR], et al
• [X] WO 9414173 A1 19940623 - AURA SYSTEMS INC [US]
• [Y] WO 2005033509 A1 20050414 - LG ELECTRONICS INC [KR], et al
• [Y] US 6171077 B1 20010109 - CALCIOLARI LEONELO ANTONIO [BR], et al
• See references of WO 2007046592A1

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)
WO 2007046592 A1 20070426; EP 1937969 A1 20080702; EP 1937969 A4 20140521; KR 100707472 B1 20070413;
US 2009252625 A1 20091008

DOCDB simple family (application)
KR 2006004055 W 20061009; EP 06799135 A 20061009; KR 20050097632 A 20051017; US 8363706 A 20061009