

Title (en)
LINEAR COMPRESSOR WITH CARBON FIBRE REINFORCED SPRING

Title (de)
LINEARVERDICHTER MIT CARBONFASERVERSTÄRKTER FEDER

Title (fr)
COMPRESSEUR LINÉAIRE POURVU D'UN RESSORT RENFORCÉ PAR DES FIBRES DE CARBONE

Publication
EP 1991784 A1 20081119 (DE)

Application
EP 07712086 A 20070123

Priority
• EP 2007050632 W 20070123
• DE 102006009229 A 20060228

Abstract (en)
[origin: DE102006009229A1] A piston housing (2) has a compressor piston movable bidirectionally along an axis (3). A support guides the compressor piston in a direction transverse to the axis. An intermediate storage stores kinetic energy of the compressor piston. The support and intermediate storage are provided by a flexible component (7) made from composite material. The flexible component is a spring (8), preferably a diaphragm spring, and is reinforced with carbon, glass, or aramide fibers. An independent claim is included for a method for cooling goods.

IPC 8 full level
F04B 35/04 (2006.01)

CPC (source: EP US)
F04B 35/045 (2013.01 - EP US); **F04B 53/145** (2013.01 - EP US); **F04B 53/146** (2013.01 - EP US)

Citation (search report)
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Designated contracting state (EPC)
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DE 102006009229 A 20060228; CN 200780006821 A 20070123; EP 07712086 A 20070123; EP 2007050632 W 20070123; ES 07712086 T 20070123; RU 2008138132 A 20070123; US 22451407 A 20070123