

Title (en)
HERMETIC COMPRESSOR

Title (de)
HERMETISCHER VERDICHTER

Title (fr)
COMPRESSEUR HERMÉTIQUE

Publication
EP 1629198 A1 20060301 (EN)

Application
EP 05741280 A 20050511

Priority
• JP 2005009006 W 20050511
• JP 2004159165 A 20040528

Abstract (en)
[origin: WO2005116450A1] A hermetic compressor including a housing containing oil and a compression mechanism for compressing a refrigerant gas. In this configuration, a cylindrical piston has under cuts which do not communicate with at least a top surface at a cylinder side of the piston and are formed on an outer circumferential surface of the piston excluding a sliding surface existing in the axial direction of a piston pin and the perpendicular direction of the piston pin viewed from the axial direction of the piston, in which the under cuts communicate with space inside the housing in the vicinity of the bottom dead center. Since the sliding surface is provided in the direction parallel to and perpendicular to the axis, inclination of the piston in the vertical direction is suppressed and at the same time oil supply to the sliding portion through the under cuts is promoted. Therefore, the sealing property and lubricant property are improved, and thus high efficiency of the compressor can be realized.

IPC 1-7
F04B 39/02; **F04B 39/00**

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

CPC (source: EP KR US)
F04B 39/0005 (2013.01 - EP KR US); **F04B 39/0022** (2013.01 - KR); **F04B 39/0094** (2013.01 - KR); **F04B 39/023** (2013.01 - EP KR US); **F04B 39/122** (2013.01 - KR); **F25B 31/02** (2013.01 - KR); **F05B 2210/14** (2013.01 - KR); **Y10S 417/902** (2013.01 - KR)

Citation (search report)
See references of WO 2005116450A1

Cited by
EP2949933A4

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
WO 2005116450 A1 20051208; CN 100430598 C 20081105; CN 1771394 A 20060510; DE 602005002205 D1 20071011; DE 602005002205 T2 20071220; EP 1629198 A1 20060301; EP 1629198 B1 20070829; JP 2005337160 A 20051208; JP 4337635 B2 20090930; KR 100701527 B1 20070329; KR 20060038921 A 20060504; US 2006257274 A1 20061116

DOCDB simple family (application)
JP 2005009006 W 20050511; CN 200580000174 A 20050511; DE 602005002205 T 20050511; EP 05741280 A 20050511; JP 2004159165 A 20040528; KR 20057020671 A 20051031; US 55384705 A 20051020