

Title (en)

By-pass device in variable displacement compressor

Title (de)

Umgehungsvorrichtung in einem Kompressor variabler Verdrängung

Title (fr)

Dispositif de dérivation dans un compresseur à déplacement variable

Publication

EP 1479907 A2 20041124 (EN)

Application

EP 04011301 A 20040512

Priority

JP 2003136407 A 20030514

Abstract (en)

A by-pass device in a variable displacement compressor has a by-pass passage, a valve body and a deformable separator. The by-pass passage interconnects a discharge pressure region with a crank chamber for releasing refrigerant from the discharge pressure region to the crank chamber. The valve body is arranged in the by-pass passage for opening and closing the by-pass passage. The deformable separator separates a back pressure region from the by-pass passage without sliding. The valve body is urged from a side of an opened position where the valve body is spaced from a valve seat toward a side of a closed position where the valve body contacts with the valve seat by pressure applied from the back pressure region to the separator. The valve body is moved from the closed position to the opened position by deforming the deformable separator. <IMAGE>

IPC 1-7

F04B 27/18

IPC 8 full level

F04B 39/10 (2006.01); **F04B 27/14** (2006.01); **F04B 27/18** (2006.01)

CPC (source: EP US)

F04B 27/18 (2013.01 - EP US)

Cited by

KR20230006288A

Designated contracting state (EPC)

DE FR IT

DOCDB simple family (publication)

EP 1479907 A2 20041124; **EP 1479907 A3 20050914**; **EP 1479907 B1 20080227**; DE 602004012022 D1 20080410; DE 602004012022 T2 20090226; JP 2004340007 A 20041202; US 2004228738 A1 20041118

DOCDB simple family (application)

EP 04011301 A 20040512; DE 602004012022 T 20040512; JP 2003136407 A 20030514; US 83430804 A 20040428