

Title (en)
Variable displacement compressor

Title (de)
Verdichter mit variabler Verdrängung

Title (fr)
Compresseur à capacité variable

Publication
EP 1744059 A1 20070117 (EN)

Application
EP 06117116 A 20060713

Priority
JP 2005207442 A 20050715

Abstract (en)
A variable displacement compressor for forming a refrigerant circuit with an external refrigerant circuit includes a housing, a drive shaft, a swash plate, a shaft seal member, a supply passage, a control valve and a gas passage. The housing has a suction chamber, a crank chamber, a discharge chamber and a shaft seat chamber formed therein. The discharge chamber is in communication with the crank chamber through the supply passage. The supply passage has the shaft seal chamber. The discharge chamber is in communication with the external refrigerant circuit through the gas passage. The supply passage is formed differently from the gas passage. A part of the supply passage is located adjacent to the suction chamber and nearer to the suction chamber than the discharge chamber.

IPC 8 full level
F04B 27/18 (2006.01)

CPC (source: EP KR US)
F04B 27/1018 (2013.01 - KR); **F04B 27/1081** (2013.01 - KR); **F04B 27/109** (2013.01 - EP KR US); **F04B 27/1804** (2013.01 - EP KR US); **F04B 39/123** (2013.01 - EP KR US); **F04B 2027/1813** (2013.01 - EP KR US); **F04B 2027/1827** (2013.01 - EP KR US); **F05B 2210/12** (2013.01 - KR); **F05B 2210/14** (2013.01 - KR); **Y10S 417/00** (2013.01 - KR)

Citation (applicant)
US 2003086791 A1 20030508 - BREINDEL JOHN A [US], et al

Citation (search report)
• [X] US 2003086791 A1 20030508 - BREINDEL JOHN A [US], et al
• [X] US 4037993 A 19770726 - ROBERTS RICHARD W
• [A] EP 1347173 A2 20030924 - CALSONIC KANSEI CORP [JP]
• [A] US 4061443 A 19771206 - BLACK DENNIS A, et al
• [A] US 4174191 A 19791113 - ROBERTS RICHARD W [US]

Designated contracting state (EPC)
DE FR IT

Designated extension state (EPC)
AL BA HR MK YU

DOCDB simple family (publication)
EP 1744059 A1 20070117; **EP 1744059 B1 20090304**; CN 100476202 C 20090408; CN 1896503 A 20070117; DE 602006005426 D1 20090416; JP 2007023900 A 20070201; KR 100756578 B1 20070907; KR 20070009378 A 20070118; US 2007014674 A1 20070118

DOCDB simple family (application)
EP 06117116 A 20060713; CN 200610125778 A 20060714; DE 602006005426 T 20060713; JP 2005207442 A 20050715; KR 20060039265 A 20060501; US 48663606 A 20060714