

Title (en)
Variable-displacement compressor

Title (de)
Kompressor mit veränderlicher Förderleistung

Title (fr)
Compresseur à capacité variable

Publication
EP 0855506 B1 20011114 (EN)

Application
EP 98101411 A 19980127

Priority
JP 1220197 A 19970127

Abstract (en)
[origin: EP0855506A2] A variable-displacement compressor comprises a compressor housing having a crank chamber, a discharge chamber, and a suction chamber. The variable-displacement compressor comprises a driving shaft rotatably supported by the compressor housing to be located in the crank chamber and a slant plate located in the crank chamber to be coupled to the driving shaft. The slant plate has a variable slant angle for the driving shaft. The variable-displacement compressor varies the variable slant angle in accordance with a pressure difference between the crank chamber and the suction chamber to control a compression capacity. The variable-displacement compressor further comprises a first communication path through which the crank chamber communicates with the discharge chamber, a first valve device for adjusting the opening area of the first communication path to control the pressure in the crank chamber, a second communication path through which the crank chamber communicates with the suction chamber, and a second valve device for adjusting the opening area of the second communication path in accordance with the pressure difference. More particularly, the second valve device perfectly closes the second communication path when the pressure difference becomes a predetermined pressure difference. <IMAGE>

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F04B 27/18

IPC 8 full level
F04B 27/14 (2006.01); **F04B 27/18** (2006.01)

CPC (source: EP)
F04B 27/1804 (2013.01); **F04B 2027/1827** (2013.01); **F04B 2027/1854** (2013.01); **F04B 2027/1859** (2013.01)

Cited by
EP0997640A3; US6102670A; EP0900937A3; US6074173A; EP0900936A3; US6290468B1; US7651321B2; US6681587B2; US6474183B1; US6257848B1

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