

Title (en)

Control valve for variable displacement compressor

Title (de)

Regelventil für einen Verdichter mit variabler Verdrängung

Title (fr)

Soupape de contrôle pour compresseur de déplacement variable

Publication

**EP 2784320 A3 20160727 (EN)**

Application

**EP 14160650 A 20140319**

Priority

JP 2013066787 A 20130327

Abstract (en)

[origin: EP2784320A2] A control valve according to one embodiment includes a body having a main passage communicating a discharge chamber with a crankcase and a sub-passage communicating the crankcase with a suction chamber, a main valve provided in the main valve passage, a sub-valve provided in the sub-passage, a power element for receiving the suction pressure of the suction chamber and generating a drive force exerted in an opening direction of the main valve in accordance with the magnitude of the suction pressure, and a solenoid for generating a drive force in a closing direction of the main valve in accordance with the amount of current supplied. The control valve is configured such that the sub-valve remains closed when the main valve is controlled and such that the sub-valve is opened after the main valve is closed. Also, a change in the area of opening of the sub-valve relative to the uplift amount of the sub-valve element from the sub-valve seat is larger than that of the main valve relative to the uplift amount of the main valve element from the main valve seat.

IPC 8 full level

**F04B 27/18** (2006.01)

CPC (source: EP)

**F04B 27/1804** (2013.01); **F04B 2027/1813** (2013.01); **F04B 2027/1827** (2013.01); **F04B 2027/1831** (2013.01); **F04B 2027/1877** (2013.01)

Citation (search report)

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Designated contracting state (EPC)

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Designated extension state (EPC)

BA ME

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