

Title (en)

Control valve for variable displacement compressor

Title (de)

Kontrollventil für einen verstellbaren Taumelscheibenkompressor

Title (fr)

Soupape de contrôle pour un compresseur à capacité variable

Publication

EP 1602828 A2 20051207 (EN)

Application

EP 05010247 A 20050511

Priority

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- JP 2004196230 A 20040702

Abstract (en)

A control valve for a variable displacement compressor has a port 23 for introducing refrigerant at discharge pressure Pd1 and a port 24 for allowing refrigerant at discharge pressure Pd2 to flow out at a controlled flow rate. A main valve 20 is provided the valve lift of which is varied according to the flow rate. A solenoid valve 21 uses a valve element 28 of the main valve 20 as a variable valve seat and supplies refrigerant to the crankcase at pressure Pc the flow rate of which is controlled according to the size of a gap formed between the variable valve seat and the hollow cylindrical valve element 32. The main valve 20 senses the flow rate but also serves as the valve seat of the solenoid valve 21. The solenoid valve 21 controls the small flow rate into the crankcase. <IMAGE>

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IPC 8 full level

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CPC (source: EP KR US)

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