

Title (en)  
Variable displacement compressor

Title (de)  
Kompressor mit variabler Fördermenge

Title (fr)  
Compresseur à déplacement variable

Publication  
**EP 1455090 A1 20040908 (EN)**

Application  
**EP 03100541 A 20030305**

Priority  
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Abstract (en)  
Variable displacement compressor (10) comprising a crankcase, housing a tilted cam plate (26) connected to a rotary shaft (20); at least one piston (30) associated to the tilted cam plate (26), the tilted cam plate (26) transferring rotary movement of the rotary shaft (20) to reciprocating movement of the piston (30), the piston (30) being arranged in a cylinder bore (28), wherein, in operation, the piston (30) draws refrigerant at suction pressure into the cylinder bore (28) and compresses the refrigerant to a discharge pressure. The compressor (10) further comprises a control valve (52) for changing the crankcase pressure with respect to the suction pressure so as to change the angle of tilt of the cam plate (26); and a control unit (60) for operating the control valve (52). According to an important aspect of the invention, the control unit (60) comprises means (66, 68) for determining a pressure differential between a crankcase pressure and a suction pressure; and means for operating a control valve (52) based on the determined pressure differential. <IMAGE>

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**F04B 27/1804** (2013.01); **F04B 2027/1845** (2013.01); **F04B 2027/1854** (2013.01); **F04B 2027/1859** (2013.01); **F04B 2201/0401** (2013.01); **F04B 2205/02** (2013.01)

Citation (search report)  
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Designated contracting state (EPC)  
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