

Title (en)  
Variable displacement piston type compressor.

Title (de)  
Kolbenverdichter mit veränderlicher Verdrängung.

Title (fr)  
Compresseur à piston à déplacement variable.

Publication  
**EP 0587023 B1 19951102 (EN)**

Application  
**EP 93113905 A 19930831**

Priority  
JP 67424792 U 19920902

Abstract (en)  
[origin: EP0587023A1] A piston type compressor includes a compressor housing enclosing a crank chamber, a suction chamber, and a discharge chamber therein. The compressor housing comprises a cylinder block having a plurality of cylinders. A drive shaft is rotatably supported in the cylinder block. A plate is tiltably connected to the drive shaft and is coupled to a plurality of pistons which may be driven in a reciprocating motion within the cylinders upon rotation of the drive shaft. Each of the pistons is provided with a rotation prevention mechanism which may include a first rotation prevention device formed on the center of the piston and second rotation prevention device disposed within the compressor housing, the first and second rotation prevention devices cooperating to prevent the piston from rotating about its own axis. The first and second rotation prevention devices each have at least one sliding surface formed thereon. Further, the rotation prevention mechanism may include a rotation prevention device formed on a center of the piston, the rotation prevention device including at least two sliding surfaces formed on both radial sides of the piston, each sliding surface smoothly sliding on an adjacent sliding surface of an adjacent rotation prevention device so that the rotation prevention device and the adjacent rotation prevention device cooperate to prevent the piston from rotating about its own axis. The sliding surfaces of the rotation prevention mechanism may be formed to be fine surfaces by machining in a finishing process. <IMAGE>

IPC 1-7  
**F04B 27/08**

IPC 8 full level  
**F04B 27/08** (2006.01); **F04B 27/12** (2006.01)

CPC (source: EP)  
**F04B 27/0878** (2013.01); **F04B 27/12** (2013.01); **F05C 2225/04** (2013.01); **F05C 2253/12** (2013.01)

Cited by  
EP0698735A3; EP0752530A1; CN1077234C; EP0823552A3; CN113710893A; EP0740076A3; US5706716A; US5974946A; EP0799994A1; US5934172A; DE102008021696A1; EP0844390A1

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**EP 0587023 A1 19940316; EP 0587023 B1 19951102**; DE 69300728 D1 19951207; DE 69300728 T2 19960418

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