

Title (en)

SLANT PLATE TYPE COMPRESSOR WITH VARIABLE DISPLACEMENT MECHANISM

Publication

**EP 0318976 B1 19920513 (EN)**

Application

**EP 88120012 A 19881130**

Priority

JP 30305087 A 19871130

Abstract (en)

[origin: EP0318976A1] A slant plate type compressor (10) including a compressor housing (20) having a cylinder block is disclosed. A plurality of cylinders (70) are formed around the periphery of the cylinder block and a piston (71) is slidably fitted within each of the cylinders and is reciprocated by a drive mechanism. A crank chamber (22) is formed between the cylinder block (21) and a front end plate (23) of the compressor housing (20). The drive mechanism includes a drive shaft (26) rotatably supported in the compressor housing, a rotor coupled to the drive shaft and rotatable therewith, and a coupling mechanism for drivingly coupling the rotor to the pistons such that the rotary motion of the rotor is converted into reciprocating motion of the pistons. The coupling mechanism includes a plate (50) having a surface disposed at a slant angle relative to the drive shaft (26). The slant angle changes in response to a change in pressure in the crank chamber (22) to change the capacity of the compressor. The compressor housing (20) includes a rear end plate (24) including suction and discharge chambers (241, 25 @@ A communication path (195) communicates the crank chamber (2 @ and the suction chamber (241). A valve control mechanism (1 @ controls the opening and closing of the communication path cause a change in pressure in the crank chamber. A flow c @ mechanism (183, 184) formed in the cylinder block admits reduced discharge gas pressure to the crank chamber (22) the discharge chamber (251) to control the crank chamber pressure which controls the slant angle of the slant pl @ (50).

IPC 1-7

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CPC (source: EP KR)

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Cited by

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