

Title (en)  
A slant plate type compressor with a variable displacement mechanism.

Title (de)  
Schiefscheiberverdichter mit variablem Hubmechanismus.

Title (fr)  
Compresseur à plateau en biais avec dispositif à déplacement variable.

Publication  
**EP 0508823 B1 19951018 (EN)**

Application  
**EP 92303249 A 19920410**

Priority  
JP 7793891 A 19910410

Abstract (en)  
[origin: EP0508823A1] A slant plate type compressor (1) with a variable displacement mechanism is disclosed which comprises a compressor housing enclosing a crank chamber (32). The housing includes a cylinder block (31). A plurality of cylinders (33) are formed for defining compression space in the cylinder block. A piston (20) is slidably fitted with each of the cylinders (33). The stroke of the piston changes in response to the change of the slant angle and defines compression volume in the compression space to change the capacity of the compressor. The position of the top dead center of the piston (20) changes within a certain range in response to the change of the stroke of the piston. A suction chamber (52) and a discharge chamber (53) are enclosed within the compressor housing. A communication path links the crank chamber with the suction chamber. A control valve varies the capacity of the compressor by controlling the link between the crank (32) and the suction chambers (52) through the path. The detecting device (70) is disposed adjacent the cylinder (33) for detecting the position of the top dead center of the piston (20) in the compression space. Therefore, the detecting device can directly detect its displacement correctly. In addition, an inexpensive and simple detecting device can be used. <IMAGE>

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IPC 8 full level  
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Cited by  
KR100891784B1; CN100445560C; KR100742040B1; US8628307B2; WO03081040A1; WO2005064162A1; WO0171186A3; WO0171186A2;  
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