

Title (en)  
Variable displacement compressor

Title (de)  
Variabler Verdrängungskompressor

Title (fr)  
Compresseur à déplacement variable

Publication  
**EP 1455089 A1 20040908 (EN)**

Application  
**EP 04004867 A 20040302**

Priority  
JP 2003056112 A 20030303

Abstract (en)

As a swash plate of a variable displacement compressor slides along a drive shaft, while being inclined, the displacement of the compressor is changed. A step is formed on the drive shaft between the swash plate and a cylinder block. The step has a seat surface, which functions as a spring seat. The seat surface faces the swash plate. A return spring is located between the spring seat and the swash plate to urge the swash plate in a direction increasing the inclination angle. The step is directly formed on the drive shaft. Therefore, the number of components and the number of steps required for manufacturing the compressor are reduced. <IMAGE>

IPC 1-7  
**F04B 27/10**

IPC 8 full level  
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CPC (source: EP US)  
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Citation (search report)  
• [X] EP 1146228 A2 20011017 - TOYODA AUTOMATIC LOOM WORKS [JP]  
• [A] EP 1150012 A2 20011031 - TOYODA AUTOMATIC LOOM WORKS [JP]

Designated contracting state (EPC)  
DE FR IT

DOCDB simple family (publication)  
**EP 1455089 A1 20040908**; JP 2004263644 A 20040924; US 2004202551 A1 20041014

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**EP 04004867 A 20040302**; JP 2003056112 A 20030303; US 78961804 A 20040227