

Title (en)  
Swash plate compressor valve

Title (de)  
Ventil für einen Taumelscheibenverdichter

Title (fr)  
Vanne pour compresseur à plateau en biais

Publication  
**EP 1314889 A3 20050608 (EN)**

Application  
**EP 02026009 A 20021121**

Priority  
JP 2001357630 A 20011122

Abstract (en)  
[origin: EP1314889A2] A shaft (16) and a rotary valve (37), which are formed integrally, are made of an iron-based metal while a cylinder block (12) is made of an aluminum-based metal. A sleeve (43) forms a slide surface between the cylinder block (12) and the rotary valve (37) when the shaft (16) and the rotary valve (37) rotate together. The sleeve (43) has a coefficient of thermal expansion closer to those of the shaft (16) and the rotary valve (37) than that of the cylinder block (12). This structure prevents an increase in the clearance between the housing and the rotary valve, due to the increased temperature at the time the shaft rotates at a high speed, and prevents gas leakage and a reduction in sealability. <IMAGE>

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

IPC 8 full level  
**F04B 27/08** (2006.01); **F04B 27/10** (2006.01)

CPC (source: EP KR US)  
**F04B 27/08** (2013.01 - KR); **F04B 27/1018** (2013.01 - EP US)

Citation (search report)  
• [A] EP 0979942 A2 20000216 - TOYODA AUTOMATIC LOOM WORKS [JP]  
• [A] US 5626463 A 19970506 - KIMURA KAZUYA [JP], et al  
• [AD] PATENT ABSTRACTS OF JAPAN vol. 018, no. 444 (M - 1658) 18 August 1994 (1994-08-18)  
• [A] PATENT ABSTRACTS OF JAPAN vol. 017, no. 686 (M - 1529) 15 December 1993 (1993-12-15)

Cited by  
EP2098727A3

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**EP 02026009 A 20021121**; BR 0204814 A 20021121; CN 02154420 A 20021121; JP 2001357630 A 20011122; KR 20020072484 A 20021120; US 30050802 A 20021120