

Title (en)

Variable-displacement swash plate compressor

Title (de)

Schiebscheibenverdichter mit veränderlicher Verdrängung

Title (fr)

Compresseur à plateau en biais à capacité variable

Publication

EP 0844393 A1 19980527 (EN)

Application

EP 97120476 A 19971121

Priority

JP 31361296 A 19961125

Abstract (en)

In a variable-displacement swash plate compressor, a secure seal is provided between a discharge chamber (16) and a suction chamber (15) in a cylinder head (14) to improve compression performance and controllability. Compressed fluid is introduced into a crank chamber (2) through a communication path (9) formed between a silencer chamber (43) and cylinder bores (31) in a cylinder block (3), which path makes the discharge chamber in the cylinder head and the crank chamber in the cylinder block communicate with each other, and through a pipe-shaped orifice (45) inserted which allows a predetermined amount of compressed fluid to flow toward the crank chamber side of the communication path. The orifice can also be directly formed in the cylinder block. The flow rate is adjusted by choosing one among a plurality of orifices with different hole diameters or lengths. <IMAGE>

IPC 1-7

F04B 27/18

IPC 8 full level

F04B 27/08 (2006.01); **F04B 27/14** (2006.01); **F04B 27/18** (2006.01)

CPC (source: EP)

F04B 27/1804 (2013.01); **F04B 2027/189** (2013.01)

Citation (search report)

- [A] EP 0318976 A1 19890607 - SANDEN CORP [JP]
- [A] US 4752189 A 19880621 - BEARINT DAVID E [US], et al
- [A] US 5518374 A 19960521 - OTA MASAKI [JP], et al
- [A] DE 3633489 A1 19870514 - TOYODA AUTOMATIC LOOM WORKS [JP]

Designated contracting state (EPC)

DE FR

DOCDB simple family (publication)

EP 0844393 A1 19980527; **EP 0844393 B1 20010228**; DE 69704149 D1 20010405; DE 69704149 T2 20010802; JP H10153172 A 19980609

DOCDB simple family (application)

EP 97120476 A 19971121; DE 69704149 T 19971121; JP 31361296 A 19961125