

Title (en)

Reciprocating piston type compressor with a rotary valve.

Title (de)

Hubkolbenverdichter mit Drehschieberventil.

Title (fr)

Compreseur à pistons avec tiroir rotatif.

Publication

EP 0531951 A1 19930317 (EN)

Application

EP 92115362 A 19920909

Priority

- JP 23185391 A 19910911
- JP 23185691 A 19910911
- JP 23502691 A 19910913

Abstract (en)

A reciprocating piston type compressor having an axial cylinder block (1) in which a plurality of axial cylinder bores (1b) are formed for receiving pistons (15) therein to compress a refrigerant and to discharge the compressed refrigerant, housings (2,4) air-tightly connected to the opposite ends of the axial cylinder block to define a suction chamber (17) for the refrigerant before compression, a discharge chamber (18) for the refrigerant after compression, and a chamber (5) for receiving a swash plate accommodated piston reciprocating mechanism operated by a rotatable drive shaft (6) axially extended through the chamber (5), and a rotary valve element (22) arranged so as to be rotated together with the drive shaft (6) and having a fluid passageway (25) for controlling the supply of the refrigerant from the suction chamber (17) to the respective cylinder bores (1b) in response to rotation thereof. The rotary valve element (22) may also have another fluid passageway for controlling the discharge of the compressed refrigerant from the cylinder bores to the discharge chamber (18) in response to rotation thereof. <IMAGE>

IPC 1-7

F04B 27/08

IPC 8 full level

F04B 27/10 (2006.01)

CPC (source: EP KR)

F04B 27/1009 (2013.01 - EP); **F04B 39/10** (2013.01 - KR)

Citation (search report)

- [X] US 1364508 A 19210104 - MOODY AXEL W
- [A] DE 923985 C 19550224 - RICARDO & CO ENGINEERS
- [A] DD 269881 A1 19890712 - STARKSTROM ANLAGENBAU VEB K [DD]
- [A] DD 258446 A1 19880720 - ORSTA HYDRAULIK VEB K [DD]
- [A] CH 103728 A 19240317 - MICHELL ANTHONY GEORGE MALDON [AU]
- [A] CH 111613 A 19250901 - CRANKLESS ENGINES LIMITED [AU]

Cited by

DE4302256A1; GB2329224B; GB2328252B; CN104595150A; GB2358891A; GB2358891B

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 0531951 A1 19930317; EP 0531951 B1 19960110; CA 2077979 A1 19930312; CA 2077979 C 19980818; DE 69207523 D1 19960222; DE 69207523 T2 19960725; KR 0116936 Y1 19980615; KR 930006325 A 19930421

DOCDB simple family (application)

EP 92115362 A 19920909; CA 2077979 A 19920910; DE 69207523 T 19920909; KR 19970003500 U 19970228; KR 920016370 A 19920908