



(19)

Europäisches Patentamt

European Patent Office

Office européen des brevets



(11)

EP 1 548 281 A3

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
28.09.2005 Bulletin 2005/39

(51) Int Cl.⁷: **F04B 27/08**, F04B 39/12

(43) Date of publication A2:
29.06.2005 Bulletin 2005/26

(21) Application number: **04028621.3**

(22) Date of filing: 02.12.2004

(84) Designated Contracting States:
**AT BE BG CH CY CZ DE DK EE ES FI FR GB GR
HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR**
Designated Extension States:
AL BA HR LV MK YU

(30) Priority: 04.12.2003 JP 2003406053

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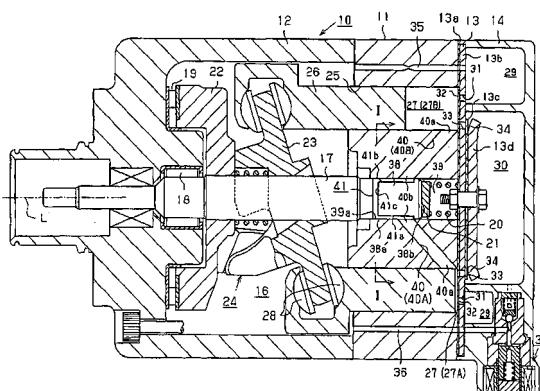
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(54) **Piston type compressor**

(57) In a piston type compressor, a housing includes a cylinder block that forms plural cylinder bores and an accommodating hole at a center thereof. The valve port assembly connected to the cylinder block includes suction and discharge ports, suction and discharge valves made of flapper valves. An end portion of the drive shaft rotatably supported by the housing is slidably accommodated in the accommodating hole. The piston in each cylinder bore and the valve port assembly form a compression chamber. The cylinder block forms therein communication holes that connect each compression chamber to the end portion that forms therein a residual gas bypass passage. The residual gas bypass passage connects one communication hole, which communicates with the high-pressure side compression chamber that has finished discharge process of gas, to another communication hole, which communicates with the compression chamber that is lower in pressure than the high-pressure side compression chamber.

FIG. 1





DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
X	US 5 380 168 A (KIMURA ET AL) 10 January 1995 (1995-01-10)	1-11	F04B27/08
Y	* abstract; figures 1,2 * * column 8, line 9 - column 11, line 20 *	5-7	F04B39/12 F04B53/14 F04B27/08
X	US 5 380 165 A (KIMURA ET AL) 10 January 1995 (1995-01-10)	1-4,8-11	
Y	* abstract; figures 1,2 * * column 7, line 24 - column 10, line 55 *	5-7	
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The present search report has been drawn up for all claims			
1	Place of search Munich	Date of completion of the search 8 August 2005	Examiner Pinna, S
CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			

ANNEX TO THE EUROPEAN SEARCH REPORT
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