



(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

- **Kawamura, Hisato K. K. Toyota Jidoshokki Kariya-shi Aichi-ken (JP)**
- **Kawachi, Shigeki K. K. Toyota Jidoshokki Kariya-shi Aichi-ken (JP)**
- **Masuda, Masanori K. K. Toyota Jidoshokki Kariya-shi Aichi-ken (JP)**
- **Takahata, Junichi K. K. Toyota Jidoshokki Kariya-shi Aichi-ken (JP)**

(30) Priority: **04.12.2003 JP 2003406053**

(71) Applicant: **KABUSHIKI KAISHA TOYOTA JIDOSHOKKI**
Aichi-ken (JP)

(74) Representative: **TBK-Patent**
Bavariaring 4-6
80336 München (DE)

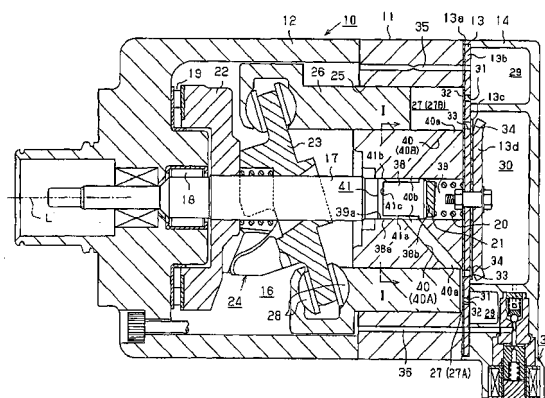
(72) Inventors:

- **Inoue, Yoshinori K. K. Toyota Jidoshokki Kariya-shi Aichi-ken (JP)**

(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





European Patent
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EUROPEAN SEARCH REPORT

Application Number
EP 04 02 8621

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
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
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X	US 5 380 165 A (KIMURA ET AL) 10 January 1995 (1995-01-10)	1-4,8-11	F04B27/08
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			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			F04B
Place of search		Date of completion of the search	Examiner
Munich		8 August 2005	Pinna, S
CATEGORY OF CITED DOCUMENTS			
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 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			

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EPO FORM 1503 03/82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
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