



Europäisches Patentamt
European Patent Office
Office européen des brevets



(11) **EP 1 420 163 A3**

(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
24.08.2005 Bulletin 2005/34

(51) Int Cl.7: **F04B 27/18**

(43) Date of publication A2:
19.05.2004 Bulletin 2004/21

(21) Application number: **03026082.2**

(22) Date of filing: **12.11.2003**

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

- Tomaru, Masaki
Setagaya-ku Tokyo, 158-0082 (JP)
- Kainuma, Hiroshi
Setagaya-ku Tokyo, 158-0082 (JP)
- Kato, Shinsuke
Setagaya-ku Tokyo, 158-0082 (JP)

(30) Priority: **12.11.2002 JP 2002327909**

(71) Applicant: **Fujikoki Corporation**
Tokyo 158-0082 (JP)

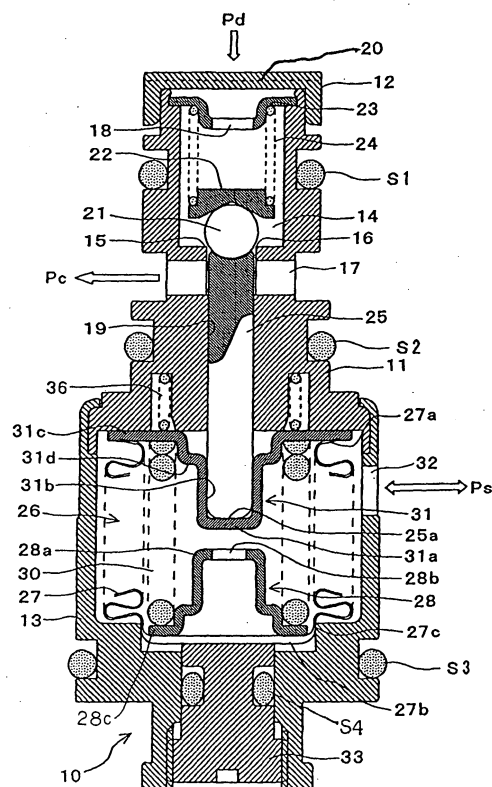
(74) Representative: **Modiano, Guido et al**
Modiano, Josif, Pisanty & Staub Ltd.,
Baaderstrasse 3
80469 München (DE)

(72) Inventors:
• Imai, Masayuki
Setagaya-ku Tokyo, 158-0082 (JP)

(54) **Control valve for variable capacity compressor**

(57) In a control valve for a variable capacity compressor, a patch member is provided to a movable-side end portion of a bellows main body. A valve rod is fitted in the fitting recessed portion formed in the patch member. A compression coil spring is disposed between the patch member and a lower patch member for supporting a fixed-side end portion of the bellows main body.

FIG. 1





European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 03 02 6082

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	EP 1 106 829 A (FUJIKOKI CORPORATION) 13 June 2001 (2001-06-13) * figure 1 * * paragraph [0026] *	1	F04B27/18
A	EP 1 030 092 A (KABUSHIKI KAISHA SAGINOMIYASEISAKUSHO; KABUSHIKI KAISHA TOYOTA JIDOSHO) 23 August 2000 (2000-08-23) * abstract; figure 2 *	1-6	
A	US 5 531 572 A (KIMURA ET AL) 2 July 1996 (1996-07-02) * figure 2 * * column 9, lines 21-33 *	1-5	
A	PATENT ABSTRACTS OF JAPAN vol. 008, no. 100 (M-295), 11 May 1984 (1984-05-11) & JP 59 013175 A (MATSUSHITA REIKI KK), 23 January 1984 (1984-01-23) * abstract; figures 4,4 *	1	
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		28 June 2005	Richmond, R
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			

3
EPO FORM 1503 03/02 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 03 02 6082

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

28-06-2005

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 1106829	A	13-06-2001	JP 2001153256 A	08-06-2001
			EP 1106829 A2	13-06-2001
			US 6439858 B1	27-08-2002

EP 1030092	A	23-08-2000	JP 3435077 B2	11-08-2003
			JP 2000088132 A	31-03-2000
			BR 9906948 A	03-10-2000
			EP 1030092 A1	23-08-2000
			US 6250600 B1	26-06-2001
			CN 1122142 C	24-09-2003
			WO 0015990 A1	23-03-2000

US 5531572	A	02-07-1996	JP 3355002 B2	09-12-2002
			JP 7119642 A	09-05-1995
			DE 4436883 A1	20-04-1995
			KR 123880 B1	01-12-1997

JP 59013175	A	23-01-1984	NONE	
