(11) **EP 1 956 244 A3**

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3: 01.10.2008 Bulletin 2008/40

(51) Int Cl.: F04C 18/02^(2006.01)

F04C 29/02 (2006.01)

(43) Date of publication A2: 13.08.2008 Bulletin 2008/33

(21) Application number: 08001720.5

(22) Date of filing: 30.01.2008

(84) Designated Contracting States:

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated Extension States:

AL BA MK RS

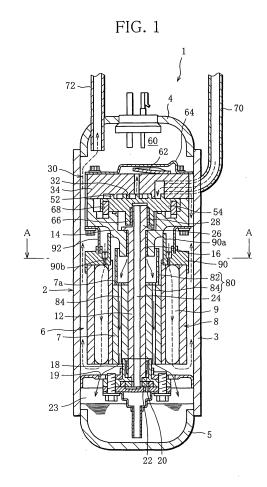
(30) Priority: 06.02.2007 JP 2007026620

(71) Applicant: Sanden Corporation Isesaki-shi, Gunma 372-8502 (JP) (72) Inventors:

- Kobayashi, Noriyuki Gunma 372-8502 (JP)
- Higashiyama, Akiyoshi Gunma 372-8502 (JP)
- (74) Representative: Feldmeier, Jürgen et al Prüfer & Partner GbR Patentanwälte Sohnckestrasse 12 81479 München (DE)

(54) Scroll fluid machine

(57)A fluid machine(1) comprises a rotating shaft (12) extending in a cylindrical body part (3) of a closed container (2) and rotatably supported via a bearing (16), an electric motor (6) that drives the rotating shaft (12) by energization thereof, and has a rotor (7) and a stator (8), a scroll unit (30) accommodated above the electric motor (6), a frame member (14) that supports the rotating shaft (12) via the bearing (16), and flow-direction restricting means (80) that restricts a direction of lubrication oil flowing downward toward the electric motor (6) from the scroll unit (30) to inhibit the lubrication oil supplied from the reservoir (23) to the bearing (16) from flowing toward the stator (8). The flow-direction restricting means (80) includes a guide member (82) fixed to a top surface (7a) of the rotor (7) and guiding the downward-flowing lubrication oil to the top surface (7a), and a discharge passage (84) for causing the lubrication oil guided to the top surface (7a) to flow to the reservoir (23).



EP 1 956 244 A3



EUROPEAN SEARCH REPORT

Application Number EP 08 00 1720

	DOCUMENTS CONSID	ERED TO BE RELEVANT			
Category	Citation of document with i of relevant pass	ndication, where appropriate, ages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)	
Х	JP 2000 205157 A (F SHIMIZU ENG CO LTD) 25 July 2000 (2000- * abstract *		1,2,5	INV. F04C18/02 F04C29/02	
Α	JP 10 047269 A (MI 17 February 1998 (1 * abstract *	TSUBISHI ELECTRIC CORP)	1-5		
А	JP 2006 214399 A (N CO LTD) 17 August 2 * figure 1 *	MATSUSHITA ELECTRIC IND 2006 (2006-08-17)	1-5		
Α		MATSUSHITA ELECTRIC IND DTO TAKASHI; HASHIMOTO 2004 (2004-09-23)	1-5		
				TECHNICAL FIELDS	
				SEARCHED (IPC)	
	The present search report has	been drawn up for all claims			
	Place of search	Date of completion of the search		Examiner	
	Munich	18 August 2008	18 August 2008 Des		
CATEGORY OF CITED DOCUMENTS X: particularly relevant if taken alone Y: particularly relevant if combined with anothed document of the same category A: technological background O: non-written disclosure P: intermediate document		E : earlier patent do after the filing dat her D : document cited i L : document cited fi	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		

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

EP 08 00 1720

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.

18-08-2008

Patent document cited in search report			Publication date	Patent family member(s)		Publication date
JF	2000205157	Α	25-07-2000	NONE		
JF	10047269	Α	17-02-1998	NONE		
JF	2006214399	Α	17-08-2006	NONE		
WC 	2004081384		23-09-2004	CN JP	2004270668 A	16-11-2005 30-09-2004
			cial Journal of the Euro			