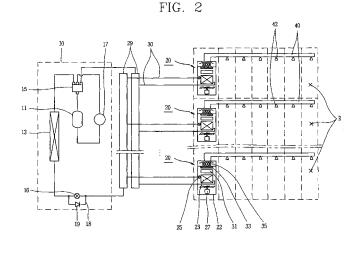
(19)	Europaisches Patentamt European Patent Office	
	Office européen des brevets	(11) EP 1 645 811 A3
(12)	EUROPEAN PATE	
(88)	Date of publication A3: 02.11.2006 Bulletin 2006/44	(51) Int Cl.: <i>F24F 3/06</i> ^(2006.01) <i>F25B 13/00</i> ^(2006.01)
(43)	Date of publication A2: 12.04.2006 Bulletin 2006/15	
(21)	Application number: 05256194.1	
(22)	Date of filing: 04.10.2005	
(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 LV MC NL PL PT RO SE SI SK TR Designated Extension States: AL BA HR MK YU	 Choi, Song, Cheongsil Apt. 6-1103 Seoul (KR) Chung, Baik-Young, Chojeongmaeul Incheon (KR) Chang, Se-Dong
(30)	Priority: 05.10.2004 KR 2004079159	Gyeonggi-Do (KR)
(71)	Applicant: LG Electronics Inc. Yongdungpo-gu Seoul (KR)	 (74) Representative: Hale, Peter et al Kilburn & Strode 20 Red Lion Street London WC1R 4PJ (GB)
· /	Inventors: Kim, Sung-Hwan, LG Village Apt. 117-302 Seoul (KR)	

(54) Air conditioner

(57) An air conditioner comprises: at least one outdoor unit (10) having a compressor (11) and an outdoor heat exchanger (13); an air process unit (20) including a heat exchanger (23) connected to the outdoor unit (10) by a refrigerant pipe, in which the air is heat exchanged, and a blower fan (27) blowing the heat exchanged air; and a duct (40) having one side connected to the air process unit and another side connected to a plurality of rooms, and introducing to the room, the air blown after heat exchange. Accordingly, the refrigerant pipe is shortened, which reduces pressure loss and a head loss. Also, oil discharged outside of the compressor together with the compressor refrigerant is easily recovered, and the amount of accumulated refrigerant is reduced, thereby reducing the risk of suffocation due to leakage of a refrigerant.





Printed by Jouve, 75001 PARIS (FR)



European Patent Office

EUROPEAN SEARCH REPORT

Application Number EP 05 25 6194

Category	Citation of document with inc of relevant passa			elevant claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	PATENT ABSTRACTS OF vol. 017, no. 395 (N 23 July 1993 (1993-0 -& JP 05 071820 A (N 23 March 1993 (1993- * paragraph [0016] - figures 1-3,6 *	I-1451), 07-23) IIPPONDENSO CO LTD), 03-23)		10	INV. F24F3/06 F25B13/00
Х	EP 1 113 233 A (CARF 4 July 2001 (2001-07 * the whole document	/-04)	11	-16	
Х	US 5 317 907 A (SHIN 7 June 1994 (1994-06 * the whole document	5-07)	1		
A	US 2004/045699 A1 (N 11 March 2004 (2004- * paragraph [0035];	03-11)) 1-	3,5	
A	US 4 507 938 A (HAMA 2 April 1985 (1985-6 * the whole document	04-02)	11	-16	TECHNICAL FIELDS SEARCHED (IPC) F24F F25B
	The present search report has be	•			
Place of search The Hague		Date of completion of the sea 13 September			Examiner IZALEZ-GRANDA, C
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		L : document	ent documen ling date t cited in the a cited for othe	nvention	

EP 1 645 811 A3

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

EP 05 25 6194

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.

13-09-2006

DE 60019246 T2 16-02-200 US 6298677 B1 09-10-200 US 5317907 A 07-06-1994 GB 2255171 A 28-10-199 JP 4327751 A 17-11-199 KR 9512153 B1 14-10-199 US 2004045699 A1 11-03-2004 US 6533026 B1 18-03-200 US 4507938 A 02-04-1985 DE 332611 A1 10-05-198 DK 410583 A 11-03-198 JP 59046465 A 15-03-198		Publication date		Patent family member(s)		Publication date
DE 60019246 T2 16-02-200 US 6298677 B1 09-10-200 US 5317907 A 07-06-1994 GB 2255171 A 28-10-199 JP 4327751 A 17-11-199 KR 9512153 B1 14-10-199 US 2004045699 A1 11-03-2004 US 6533026 B1 18-03-200 US 4507938 A 02-04-1985 DE 3332611 A1 10-05-198 DK 410583 A 11-03-198 JP 59046465 A 15-03-198	Α	23-03-1993	NONE			
JP 4327751 A 17-11-199 KR 9512153 B1 14-10-199 US 2004045699 A1 11-03-2004 US 6533026 B1 18-03-200 US 4507938 A 02-04-1985 DE 3332611 A1 10-05-198 DK 410583 A 11-03-198 JP 59046465 A 15-03-198	A	04-07-2001	DE	60019246	Т2	12-05-2005 16-02-2006 09-10-2001
US 4507938 A 02-04-1985 DE 3332611 A1 10-05-198 DK 410583 A 11-03-198 JP 59046465 A 15-03-198	A	07-06-1994	JP	4327751	A	28-10-1992 17-11-1992 14-10-1995
DK 410583 A 11-03-198 JP 59046465 A 15-03-198	A1	11-03-2004	US	6533026	B1	18-03-2003
SE 460307 B 25-09-198	Α	02-04-1985	DK JP KR SE	410583 59046465 8801148 460307	A A B1 B	10-05-1984 11-03-1984 15-03-1984 01-07-1988 25-09-1989 04-05-1984
		A A A A1	date A 23-03-1993 A 04-07-2001 A 07-06-1994 A1 11-03-2004	date A 23-03-1993 NONE A 04-07-2001 DE DE US A 07-06-1994 GB JP KR A1 11-03-2004 US A 02-04-1985 DE DK JP KR SE	date member(s) A 23-03-1993 NONE A 04-07-2001 DE 60019246 DE 60019246 0298677 A 07-06-1994 GB 2255171 JP 4327751 KR 9512153 A1 11-03-2004 US 6533026 A 02-04-1985 DE 3332611 DK 410583 JP 59046465 KR 8801148 SE 460307	date member(s) A 23-03-1993 NONE A 04-07-2001 DE 60019246 D1 DE 60019246 T2 US 6298677 B1 A 07-06-1994 GB 2255171 A JP 4327751 A KR 9512153 B1 A1 11-03-2004 US 6533026 B1 A 02-04-1985 DE 3332611 A1 DK 410583 A JP 59046465 A KR 8801148 B1 SE 460307 B

FORM P0459