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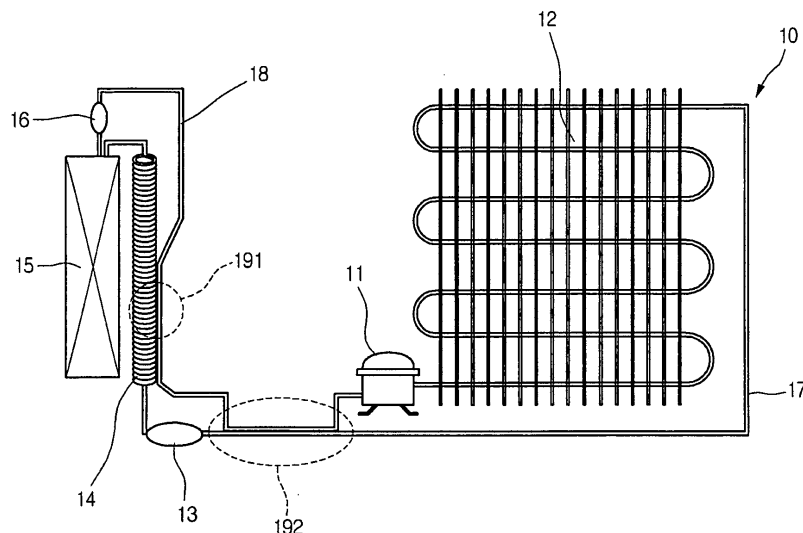
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(54) **Refrigerator**

(57) There is provided a refrigerator. The refrigerator includes a compressor (11) for compressing a refrigerant, a condenser (12) for heat-exchanging the compressed refrigerant with ambient air, an expansion member (14) for expanding the heat-exchanged refrigerant, a condensing pipe (17) interconnecting the condenser (12) and

the expansion member (14), a vaporizer (15) for heat-exchanging the expanded refrigerant with a cooling air in a freezing or cooling chamber, and a suction pipe (18) interconnecting the vaporizer (15) and the compressor (11) and associated with the condensing pipe (17) to allow a heat exchange between the suction pipe (18) and the condensing pipe (17).

FIG.1





EUROPEAN SEARCH REPORT

Application Number
EP 06 01 1847

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	WO 01/57454 A1 (SOKULSKI ANDRZEJ [PL]) 9 August 2001 (2001-08-09) * page 5 - page 9; figures 1-9 *	1-5,8, 10,12	INV. F25B40/00
X	EP 1 577 619 A1 (NIHON FREEZER CO LTD [JP]) 21 September 2005 (2005-09-21) * paragraph [0044] - paragraph [0048]; figures 1,2A,2B *	1,2,8, 10,12	ADD. F25B41/06
X	WO 02/25179 A1 (TEMPPIA CO LTD [KR]; CHOI YONG WON [KR]; HONG HAN EI [KR]; WANG HWA SI) 28 March 2002 (2002-03-28) * the whole document *	1,6,8,10 9	
X	FR 1 516 944 A (SIEMENS ELEKTROGERAETE GMBH) 5 February 1968 (1968-02-05) * page 4 - page 7; figures 1-14 *	1,2,4-8, 10-13 9	
A	US 6 848 268 B1 (MEMORY STEPHEN B [US] ET AL) 1 February 2005 (2005-02-01) * the whole document *	1,2,4-13	
A	US 2 434 118 A (NEWMAN DELBERT F) 6 January 1948 (1948-01-06) * the whole document *	1,2,4,5, 10	F25B F28D
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 28 October 2010	Examiner Gaspar, Ralf
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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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 06 01 1847

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
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28-10-2010

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 0157454	A1	09-08-2001	AU 3250001 A 14-08-2001
		PL 338281 A1	13-08-2001
EP 1577619	A1	21-09-2005	AU 2002349758 A1 23-06-2004
		CN 1723372 A	18-01-2006
		HK 1082790 A1	13-11-2009
		WO 2004051155 A1	17-06-2004
		JP 3934140 B2	20-06-2007
		TW 269017 B	21-12-2006
		US 2006065013 A1	30-03-2006
WO 0225179	A1	28-03-2002	AU 9240301 A 02-04-2002
		AU 9240401 A	02-04-2002
		WO 0225178 A1	28-03-2002
		KR 20020024537 A	30-03-2002
FR 1516944	A	05-02-1968	NONE
US 6848268	B1	01-02-2005	BR PI0416764 A 27-02-2007
		CN 1864037 A	15-11-2006
		DE 112004002189 T5	31-08-2006
		GB 2421563 A	28-06-2006
		JP 2007512501 T	17-05-2007
		KR 20060125759 A	06-12-2006
		WO 2005057095 A1	23-06-2005
US 2434118	A	06-01-1948	NONE