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(11) **EP 0 899 523 A3**

(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
12.01.2000 Bulletin 2000/02

(51) Int. Cl.⁷: **F25D 11/00**, F25D 17/06,
F24F 13/10

(43) Date of publication A2:
03.03.1999 Bulletin 1999/09

(21) Application number: **98306879.2**

(22) Date of filing: **27.08.1998**

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

(30) Priority: **30.08.1997 KR 9744864**
30.08.1997 KR 9744865
30.08.1997 KR 9744874
24.09.1997 KR 9748580
24.09.1997 KR 9748581
30.09.1997 KR 9750535

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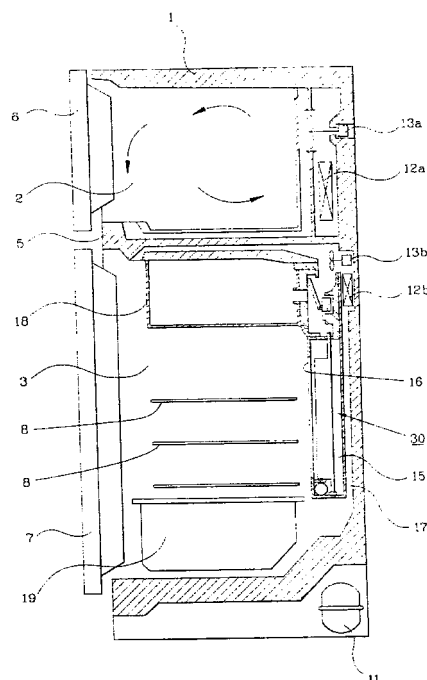
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(54) **Refrigerator with cool air distributing device**

(57) Disclosed is a refrigerator a device (30) for dispersing cool air. In a duct (15) of a cooling compartment (3) is installed a horizontal dispersing blade (43) of planar plate shape, which is rotatable around a vertical axis. The blade (43) disperses cool air horizontally. In the duct (15) are installed a cam (53) rotatable around a horizontal axis, and a motor (59) for rotating the cam (53). The rotation of the cam (53) is converted to the reciprocal rotation of the blade (43) by a transmission part (69). Thus, while the cam (53) is rotated by the motor (59), the cool air is dispersed horizontally in the compartment (3), and the temperature in the compartment (3) is maintained uniform. Further, if the cam (5) is stopped, the cool air can be concentrated on a specific area.

FIG. 5



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EUROPEAN SEARCH REPORT

Application Number
EP 98 30 6879

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.6)
Y	PATENT ABSTRACTS OF JAPAN vol. 006, no. 253 (M-178), 11 December 1982 (1982-12-11) & JP 57 148132 A (NIPPON DENSO KK), 13 September 1982 (1982-09-13) * abstract *	1,2	F25D11/00 F25D17/06 F24F13/10
A	---	3,4,12	
Y	DE 196 41 722 A (LG ELECTRONICS INC) 17 April 1997 (1997-04-17)	1,2	
A	* column 2, line 63 - column 4, line 61; figure 5 *	7,16	
A	---	7,8,12, 13	
A	US 2 012 527 A (E.H.BATCHELDER) 27 August 1935 (1935-08-27) * page 1, column 2, line 23 - page 2, column 1, line 65; figure 1 *	12,13	
A	US 3 380 372 A (PERRY ROBERT P) 30 April 1968 (1968-04-30) * column 2, line 24 - column 3, line 21; figure 3 *		
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			F25D F24F
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 17 November 1999	Examiner Jessen, F
CATEGORY OF CITED DOCUMENTS		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	
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			

EPO FORM 1503 03/82 (P04C01)

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

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The members are as contained in the European Patent Office EDP file on
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17-11-1999

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
JP 57148132 A	13-09-1982	NONE	
DE 19641722 A	17-04-1997	AU 700288 B	24-12-1998
		AU 6816696 A	17-04-1997
		CN 1151506 A	11-06-1997
		GB 2306211 A,B	30-04-1997
		IT MI962006 A	30-03-1998
		JP 2779352 B	23-07-1998
		JP 9243226 A	19-09-1997
US 2012527 A	27-08-1935	NONE	
US 3380372 A	30-04-1968	NONE	