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(71) Applicant: INDESIT INDUSTRIA ELETTRODOMESTICI
ITALIANA S.p.A.
Str. Piosasco Km 17
I-10040 Rivalta Turin(IT)

(72) Inventor: Alluto, Luigi
Via Montebianco 24
I-10024 Moncalieri (Torino)(IT)

(74) Representative: Jacobacci, Filippo et al,
c/o JACOBACCI-CASETTA & PERANI S.p.A. Via Alfieri 17
I-10121 Torino(IT)

(54) **Perfected refrigerator.**

(57) The invention relates to a perfected refrigerator with two compartments, one for frozen food (2) and one for cold food (1), capable of withstanding working loads of considerable intensity in the freezer compartment without however, harming the foods or drinks in the cold food compartment.

This result is achieved by inserting into the cold food compartment (1) one or more elements (5) which are capable of storing heat or cold in predetermined periods of operation and of yielding them up in other periods of operation.

In particular it deals with the provision of a heat storage element (5) in the cold food compartment of the refrigerator which may be constituted for example by a tank of pure water (or of a solution with a freezing point slightly above 0°C, which is placed in the coldest zone in this compartment (just below the evaporator).

Thus, during normal operation, the water in the tank (5) remains in the liquid state while under conditions of operation with the compressor continuously activated, as occurs during rapid freezing, if the temperature within the cold food compartment tends to fall below zero (such as would harm some foods contained therein) the mass of water contained in the said tank (5) introduces an obstacle to this lowering of the temperature. Indeed before the temperature in the compartment (1) can fall below zero, the

refrigerator must take all the latent heat of freezing from the water in the tank (5) which is necessary to transform it into ice and hence this mass of water, if of suitable size, prevents the temperature in the compartment from falling below zero before the freezing operation of the food just introduced is ended.

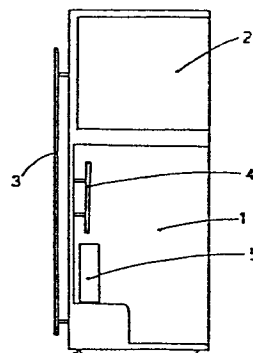


FIG. 1



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. ³)
D,Y	--- US-A-2 741 100 (YOUNG) * column 2, line 20 - column 7, line 18; figures 1-5 *	1-3,5- 7,13, 17	F 25 D 11/02
Y	--- US-A-2 145 775 (MUFLY) * page 2, right-hand column, line 35 - page 10, right-hand column, line 13; figures 1-38 *	1,3,6- 9,13, 15,17	
A	--- US-A-2 428 312 (HERBENER) * column 3, line 33 - column 12, line 22; figures 1-17 *	1,3-9, 13,16	
A	--- US-A-2 359 780 (MUFLY) * page 2, left-hand column, line 18 - page 10, right-hand column, line 55; figures 1-16 *	1,3,5- 9,13, 15	TECHNICAL FIELDS SEARCHED (Int. Cl. ³) F 25 D F 25 B F 25 C
A	--- US-A-2 641 109 (MUFLY) * column 3, line 9 - column 23, line 17; figures 1-9 * --- -/-	1,3,5- 7,13, 16	
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 11-02-1983	Examiner BOETS A.F.J.
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			



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. 2)
A	US-A-2 703 480 (RIEMENSCHNEIDER) * column 1, line 33 - column 6, line 33; figures 1-7 *	1,2,15	
A	US-A-2 291 826 (MUFFLY)		
A	US-A-2 511 851 (IWASHITA)		
A	GB-A- 894 839 (WIRRAL REFRIGERATION)		
A	CH-A- 146 947 (FARKAS)		
A	FR-A-1 239 733 (PETIT)		TECHNICAL FIELDS SEARCHED (Int. Cl. 3)
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