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Refrigeration system for a chilled product vending system.

(57)

A control circuit for cycling the evaporator fans (EFM) on and off independently of the operation of the compressor (CP) of the refrigeration system is described. The evaporator fan (EFM) is cycled on with the compressor (CP) and continues to run during the entire compressor ON cycle. A first timer (D) causes the evaporator fan (EFM) to run for an additional delay period following the cycling OFF of the compressor (CP) and the fans continue to blow air over the evaporator coil (EC) until the temperature of the evaporator coil (EC) is sufficiently above the freezing point of water (32°F, 0°C). The fans are then cycled off. A second cycling timer (CY) is provided to intermittently cycle the evaporator fans on and off for predetermined short intervals following the above-described delay period, and during the time when the compressor (CP) is off. A third timer (fP) is provided to preclude freezing of the vended products and/or the evaporator coil (EC) when a vending machine is disposed in a below freezing environment. This timer (fP) is enabled when the thermostatic temperature switch (TS) which controls the compressor opens, and will time out to cycle on the evaporator fans for continuous operation for a predetermined period of time if the temperature switch remains open in excess of a predetermined period of time.

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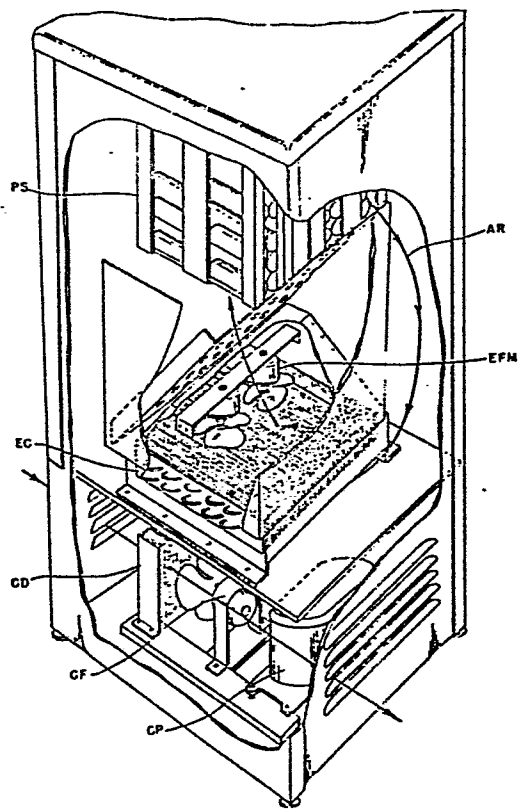


FIG. 1



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EUROPEAN SEARCH REPORT

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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. 4)
A	US-A-2 529 470 (JOHNSON) * Whole document *	1	F 25 D 17/06 F 25 D 29/00
A	--- US-A-4 136 730 (KINSEY) * Whole document *	1	
A	--- US-A-2 962 872 (CROTSEY et al.) -----		
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int. Cl. 4)
Place of search THE HAGUE			Date of completion of the search 24-09-1985
			Examiner SILVIS H.
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	