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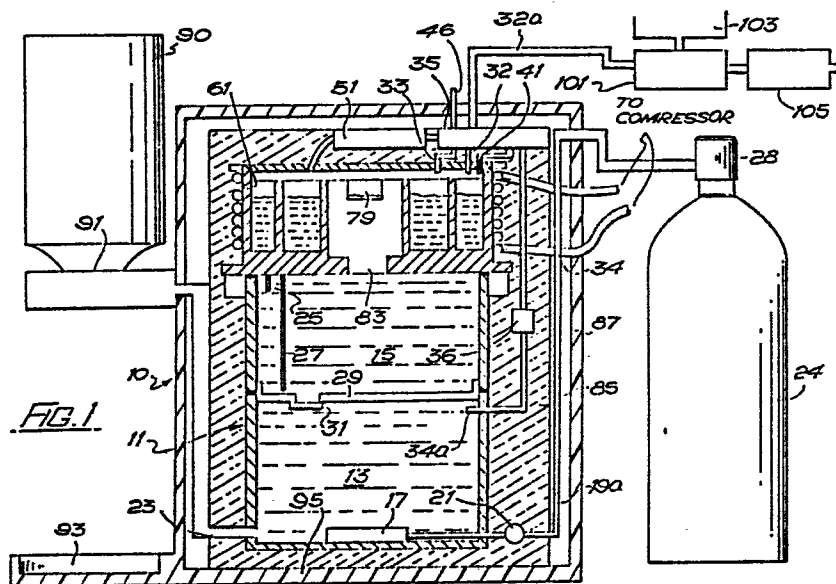
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(54) **Refrigerated drink dispenser.**

(57) A dispenser includes a continuous carbonator with a closed carbonating tank (11) containing therein a carbon dioxide diffuser, an inlet for carbon dioxide to the diffuser and an outlet for carbonated water from the carbonating tank, a closed still water tank (15) vertically disposed above the carbonator tank (13), the still water tank having an outlet coupled to supply water by gravity to the carbonator tank, a check valve (31) between the still water tank and the carbonator tank to prevent backflow, a high (25) and low level (27) water sensor in the still water tank, a vent outlet (33) from the still water tank a water supply inlet to the still water tank, with the valves for equalizing the pressure between the carbonator tank and still water tank, valves responsive to the high and low level sensors to: when the water level is between the upper and lower level to open the equalizing valves and to close the vent and to close the water inlet, when the low level is reached, to close the equalizing valve, to open the vent, and to open the water inlet to refill the still water chamber; and to sense when the high level is reached and to return to the condition where the equalizing valve is opened and the vent and the supply are closed; and a spiral ice bank interposed between the water inlet and the still water tank, the incoming water adapted to run over ice in the ice bank to be cooled as it is supplied to the still water tank.





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)
X	US-A-2 538 015 (KLEIST) * Figures 1,2; column 3, line 32 - column 4, line 6 *	23,24	B 67 D 1/00

A	GB-A-2 100 228 (ROBINSON) * Figures 1A,2; page 2, lines 2-85 *	1,14	

A	GB-A-1 014 648 (PRODUCT R&B INC.)		
A	DE-B-1 264 983 (WELTY)		
A	US-A-4 008 832 (RODTH)		
A	US-A-3 809 292 (BOOTH et al.)		

			TECHNICAL FIELDS SEARCHED (Int. Cl.4)
			B 67 D
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 09-09-1987	Examiner DEUTSCH
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	



CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

- ☐ All claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for all claims.
- ☐ Only part of the claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claims:
- ☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

X LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirement of unity of invention and relates to several inventions or groups of inventions, namely:

- 1) Claims 1-22: A carbonated beverage dispenser comprising
 - a continuous carbonator
 - a closed still water tank supplying water by gravity to the carbonator
- 2) Claims 23-26: An ice bank for cooling water supplied to a drink dispenser

- ☒ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- ☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
- ☐ None of the further search fees has been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims: