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(54) **Refrigerator appliance with drink dispensing device**

(57) Refrigerator appliance, particularly for household use, comprising a heat-insulated case (2) closed by a door (4) and a device (12) dispensing drinks outside the refrigerator appliance. The dispensing device (12) comprises a tap (13) for the output of drinks, valve means (14) suitable to control the output of drinks, and a frame (17) applied onto the external part of said door (4) of the refrigerator. The tap (13) has a dispensing mouth (15) that projects from the external profile of the door (4) of the heat-insulated case (2) and it is associated with the frame (17). The frame (17) is provided with a recessed part (18) that is suitable to receive containers of various type for their filling with drinks that are dispensed by the tap (13).

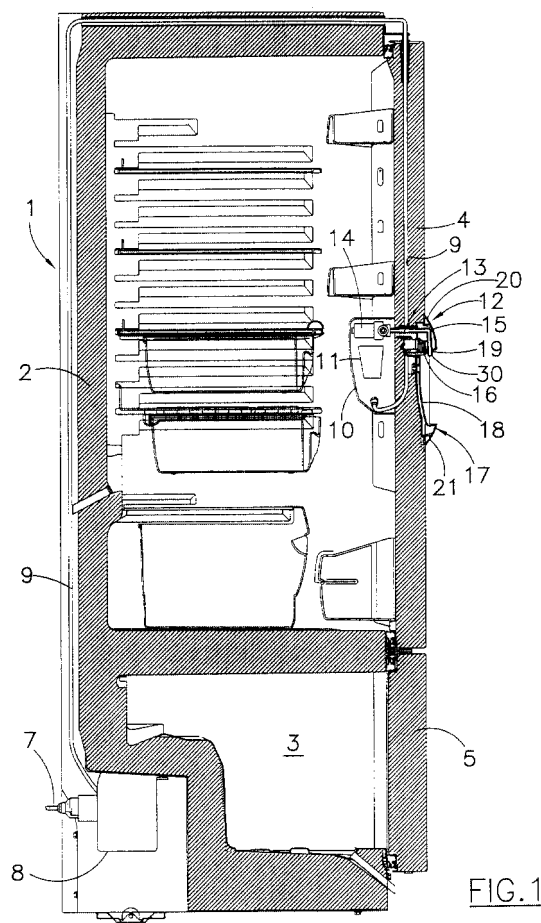


FIG. 1

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Description

[0001] The present invention refers to a refrigerator appliance with drink dispensing device.

[0002] Household refrigerators are known that, within them, are provided with drink dispensing devices. Such devices are suitable to contain, inside of the heat insulated case of the refrigerator, a bottle containing the desired drink, in an upside down position, and they comprise a tap, for instance a pressure type one, that opens when one wants to fill a glass with the drink. In this way, the drink in the bottle is kept at the temperature present inside the heat insulated case of the refrigerator.

[0003] In such refrigerators an appropriate housing is provided in the door of the heat-insulated case of the same refrigerator in order to receive a glass that must be filled with the drink present in the bottle inside of the heat-insulated case. However this housing only allows the filling of glasses but not of larger containers such as bottles, etc.

[0004] In view of the state of the art herein described, scope of the present invention is to provide a refrigerator appliance that by means of a device dispensing fresh water or other liquids allows to overcome the aforesaid disadvantage.

[0005] According to the present invention, such scope is attained by means of a refrigerator appliance, particularly for household use, comprising a heat-insulated case closed by a door, a device for dispensing drinks outside the refrigerator, said dispensing device comprising a tap for the output of drinks and valve means suitable to control said output of drinks, characterized in that the dispensing mouth of said tap projects from the external profile of the door of the heat-insulated case and said dispensing device comprises a frame applied onto the external part of said door of the refrigerator and associated with said dispensing mouth, said frame being provided with a recessed part that is suitable to receive various type of containers for their filling with drinks that are dispensed by said tap.

[0006] Owing to the present invention it is possible to realize a refrigerator appliance with a drink dispensing device that makes the filling not only of glasses but also of larger containers such as bottles possible.

[0007] The characteristics and the advantages of the present invention will become evident from the following detailed description of an embodiment thereof, that is illustrated as a non limiting example in the enclosed drawings, in which:

Figure 1 is a side section according to a vertical plane of a refrigerator appliance according to the present invention;

Figure 2 is a front view of the refrigerator appliance in Figure 1.

[0008] With reference to Figures 1 and 2 a refrigerator according to the present invention is shown. The refrigerator

comprises in a way known per se a cabinet 1 that encloses on its inside a heat-insulated case 2 and, on the bottom of the same, a freezing cell 3. The heat-insulated case 2 and the freezing cell 3 are frontally open and they are provided with doors 4 and 5 that are hinged to the cabinet 1 in order to be revolving around a vertical axis. On the back of the case 2 a condenser and a compressor that is part of a traditional refrigeration system not visible in the figures are provided.

[0009] The refrigerator is provided with a water inlet 7, that is directly connectable to the household water network. Valve devices 8 are associated with the water inlet 7 that are preferably provided with a liter counter not visible in the figures. In output of the valve devices 8, a duct for the transport of water 9, housed in a back interspace of cabinet 1, goes up to the top of the cabinet 1, still continues in an upper interspace of the cabinet 1 towards the front part of the same, passes through the door 4 and ends in a water accumulation tank 10 destined to contain a drinking water reserve. The tank 10 is mounted into the internal wall of the door 4 as a bracket and it preferably has an elongated shape. To the tank 10 a filtering device 11 is associated that is suitable to carry out a function of chemical filtering for the water supplied by the water network, for the elimination of possible organic compounds, of products of the reaction of the chlorine present in the water, of substances released by the pipes of the water network.

[0010] The filtering device 11 is part of a dispensing device 12 comprising a tap 13 that takes the filtered water outside. Between the filtering device 11 and the dispensing device 12 second valve means 14 are located.

[0011] The tap 13 comprises a right angle dispensing mouth 15 that projects from the external profile of the door 4 of the heat-insulated case 2 by approximately 2 cm and it is provided with a button 16 adjacent to an end 30 of the dispensing mouth 15; the button 16 is connected with valve means 8 and 14 in order to control the opening or the closing of the same tap.

[0012] The dispensing device 12 also comprises a frame 17, made up of an appropriately contoured sheet of plastic material, applied outside of the door 4 of the heat-insulated case 3 in a substantially central position. The frame 17 comprises a recessed part 18 approximately 3cm deep and provided on top with a substantially rectangular hole 19, a top projection 20 and a bottom projection 21. The projection 20 is hollow inside in order to contain the dispensing mouth 15 of the tap 13 in such a way that the end 30 of the same dispensing mouth 15 can project from hole 19 together with the button 16. The recessed part 18 of the frame 17 is made in such a way so as to allow to fill with water not only a glass but even other types of larger containers such as bottles or carafes with capacity greater than a litre. For the aforesaid function the recessed part 18 is aided also by the projection 21 in order to allow the resting of the containers to be filled.

[0013] As an additional variant of the embodiment il-

lustrated herein it is possible that there is no connection with the external water network and no filtering device but only a tank for the water or other drinks connected with the dispensing device 12.

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Claims

1. Refrigerator appliance, particularly for household use, comprising a heat-insulated case (2) closed by a door (4), a device (12) for dispensing drinks outside the refrigerator appliance, said dispensing device (12) comprising a tap (13) for the output of drinks and valve means (14) suitable to control said output of drinks, **characterized in that** the dispensing mouth of said tap (13) projects from the external profile of the door (4) of the heat-insulated device (2) and said dispensing device (12) comprises a frame (17) applied to the external part of said door (4) of the refrigerator and associated with said dispensing mouth (15) said frame (17) being provided with a recessed part (18) that is suitable to receive containers of various type for their filling with drinks that are dispensed by said tap (13). 10 15 20 25
2. Refrigerator appliance according to claim 1, **characterized in that** said frame (17) is provided with a cavity (15) suitable to receive said dispensing mouth (15) of said tap (13) and said recessed part (18) has a hole (19) on its top that is suitable to receive one end (30) of said tap (13). 30
3. Refrigerator appliance according to claim 2, **characterized in that** said dispensing device (12) comprises a button (16) adjacent to said end (30) of said dispensing mouth (15) of the tap (13) and connected with said valve means (8, 14) in order to control the opening and the closing of said tap (13). 35
4. Refrigerator appliance according to claim 1, **characterized in that** said frame (17) is made of plastic material. 40
5. Refrigerator appliance according to claim 1, **characterized in that** said refrigerator appliance comprises tanks (10) for the accumulation of drinks. 45
6. Refrigerator appliance according to claim 1, **characterized in that** said refrigerator appliance comprises means (7-8) for the connection with an external water network, said connection means (7-8) being associated with said dispensing device (12). 50
7. Refrigerator appliance according to claim 6, **characterized in that** said dispensing device (12) comprises means (11) for the filtering of the water coming from the external water network. 55

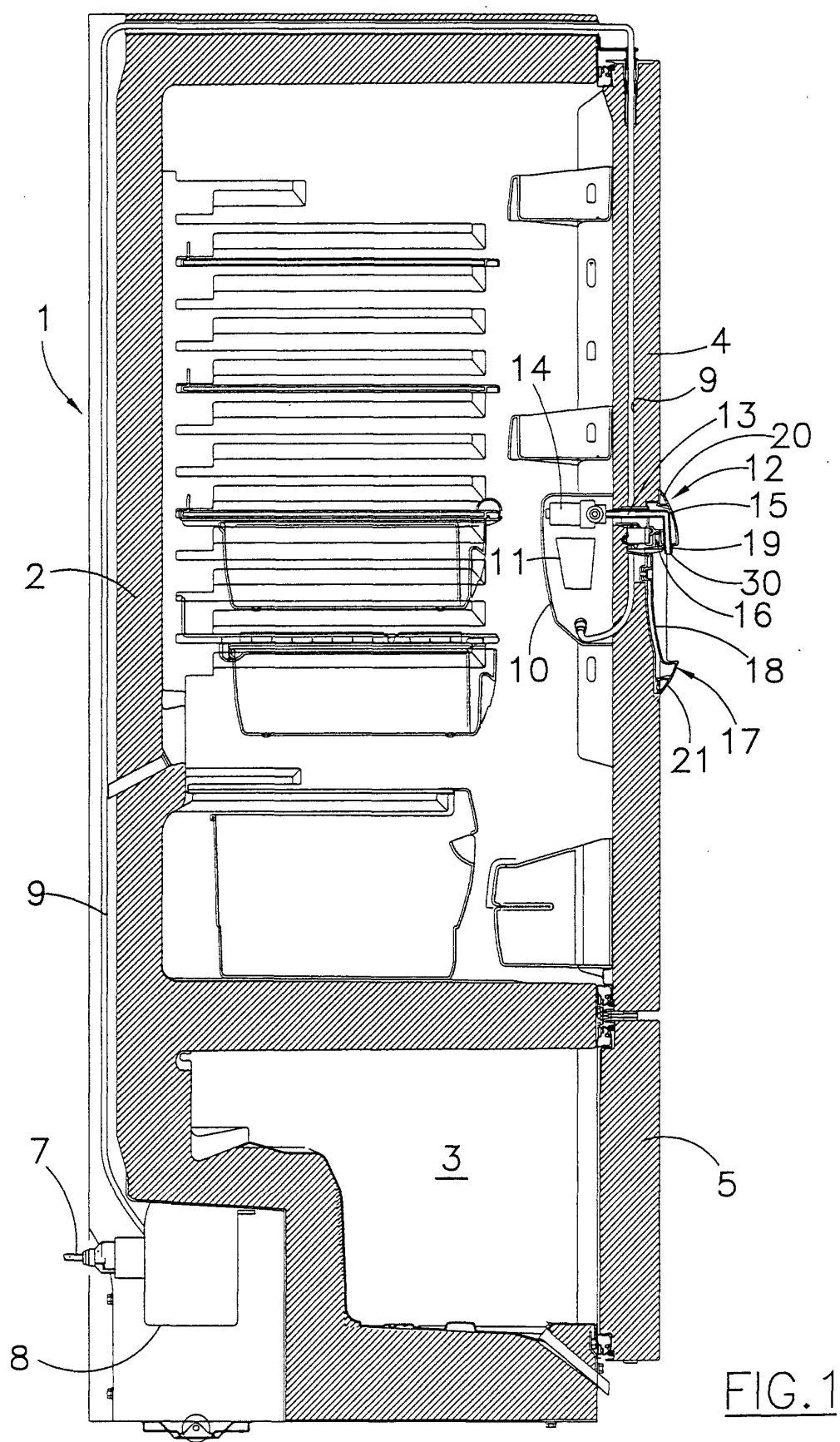


FIG.1

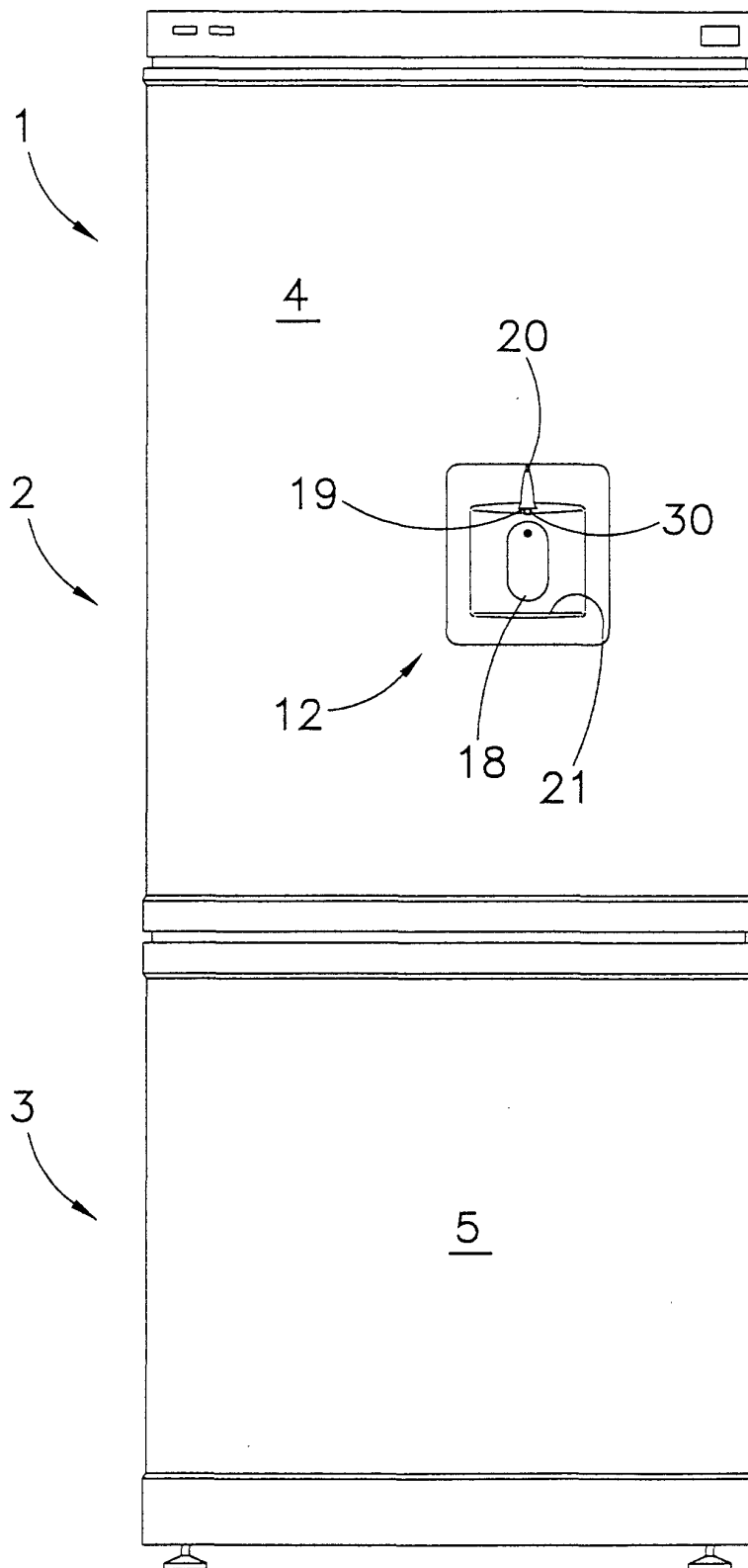


FIG.2