(11) EP 2 669 608 A2

(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication: **04.12.2013 Bulletin 2013/49**

(51) Int Cl.: **F25D 11/00** (2006.01)

(21) Application number: 13168527.3

(22) Date of filing: 21.05.2013

(84) Designated Contracting States:

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated Extension States:

BA ME

(30) Priority: 01.06.2012 US 201261654668 P

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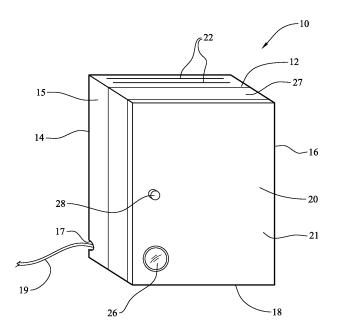
Remarks:

The application is published incomplete as filed, Claim 8 is double, Rule 68(1) EPC).

(54) Refrigerated medicine cabinet

(57) A refrigerated medicine cabinet for storing medicine, cosmetics and other small items requiring refrigeration is disclosed. The refrigerated medicine cabinet is

intended to be mounted on a bathroom wall. The interior of the refrigerated medicine cabinet includes a plurality of adjustable shelving systems.



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FIELD OF THE INVENTION

[0001] The present invention relates generally to storage of medicine at a household. The invention is more particularly directed to a refrigerated medicine cabinet which may keep medicine and other non-food items which require refrigeration at the correct refrigerated temperature.

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DESCRIPTION OF THE PRIOR ART

[0002] Certain types of medicine require refrigeration. These medicines may be kept in refrigerated medicine cabinets. Certain designs of refrigerated medicine cabinets, or refrigerators to store medicine exist in the prior art. Perhaps the biggest usage is in hospitals and other medical facilities, where large refrigerated medicine cabinets which may be floor mounted are used. However, certain medications taken at home also require refrigeration. One alternative to keeping these medications refrigerated at home would be to keep these medications in a kitchen refrigerator with food items. However, this may not be convenient, as medications are often taken in the bathroom. Topical medications, which may require disrobing, would also most likely be taken in the bathroom. Also, it may be undesirable to keep medications in a kitchen refrigerator with food, as the medications, particularly ointment-type medications may give-off odors which would be undesirable in a kitchen refrigerator containing food. Also, kitchen refrigerators typically do not contain small shelves suitable for storing medicine requiring refrigeration. Further, young children in search of food in a kitchen refrigerator may come across medications stored in a kitchen refrigerator and ingest the medication thinking the medication is a food item as the young children possibly see their parents taking the medication. Additionally, certain cosmetics require refrigeration. It would be inconvenient to store cosmetics in a kitchen refrigerator, since they typically are applied in a bathroom, or bedroom. For that reason, the prior art has recognized the need for a refrigeration cabinet designed for medicines, cosmetics and other small items which would be intended to be installed in a bathroom. Since bathrooms typically do not have a lot of floor space, the refrigerated bathroom cabinet would generally be intended to be located on a bathroom wall, as is the case for a conventional bathroom wall cabinet.

[0003] An early attempt to solve the above mentioned problems of storage of medicine requiring refrigeration was to place a special secure compartment in a conventional kitchen refrigerator to be used as a medicine cabinet. While this special compartment may have certain advantages over just placing medicine anywhere in the kitchen refrigerator, it has its' drawbacks. The special compartment would require work, perhaps by a trained technician, to install the special compartment. The spe-

cial compartment would reduce storage capacity of the kitchen refrigerator for storage of food. And the special compartment would still require a trip to the kitchen to retrieve the refrigerated items, which may be more desirably taken in the bathroom, and then another trip back to the kitchen to store the medication in the storage compartment of the kitchen refrigerator. The storage compartment in the kitchen refrigerator may still allow odors from certain medications to infiltrate the food storage portion of the modified kitchen refrigerator.

[0004] Another attempt to solve the above mentioned problems of storage of medicine requiring refrigeration was to design a compact refrigeration apparatus which would be attachable to furniture, medicine cabinets, or other household objects. While this design is perhaps functional, it would not seem very stylish to have a compact refrigeration apparatus attached to furniture, or a medicine cabinet, likely including a power cord running to the compact refrigeration apparatus. In the case of the compact refrigeration apparatus attached to furniture, this could require running the cord over a floor, possibly creating a tripping hazard. Also, bathrooms typically do not have any furniture to attach the compact refrigeration apparatus to.

[0005] An additional attempt to solve the above mentioned problems of storage of medicine requiring refrigeration was to design a medicine cabinet, similar to a conventional medicine cabinet, with a mirror on the front and mountable to a bathroom wall and, as best understood, of a conventional size. This medicine cabinet would be partitioned vertically in halves. One half would have an access door and would be at ambient temperature. This half would contain bathroom items not requiring refrigeration. The other half would be refrigerated and could also include a cabinet at ambient temperature if desired and would contain items requiring refrigeration, such as medicine and cosmetics. Initially, this would seem to solve the above mentioned problems of storage of medicine requiring refrigeration. However, bathroom cabinets, especially bathroom cabinets used by a plurality of people, generally utilize all available space, often being overcrowded. Taking away half the space of a bathroom cabinet for refrigeration, would likely leave the portion of the bathroom cabinet which is not refrigerated with insufficient space to store all items requiring storage.

[0006] From the above, it is apparent that a definite need in the art exists for a refrigerated medicine cabinet located in a bathroom. This medicine cabinet should be dedicated to storing only items requiring refrigeration. The medicine cabinet should be stylish in appearance and be consistent with the design and appearance of any other cabinets in the bathroom.

SUMMARY OF THE INVENTION

[0007] A refrigerated medicine cabinet comprising:

an exterior with top, left, right, bottom, front and rear

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sides.

the refrigerated medicine cabinet including a refrigerated portion for storing medicine, cosmetics and other small items and an attached refrigeration unit, recessed ventilation ducts located on the top side of the refrigerated medicine cabinet refrigeration unit, a door forming the front side,

an interior containing a plurality of shelving systems, each shelving system consisting of an upper shelf, a lower shelf and vertical partitions connecting the upper shelf and lower shelf on each shelving system.

[0008] In another embodiment of the invention, the front exterior of the refrigerated medicine cabinet may have a large mirror, a wood exterior, custom designed, or be painted to any desirable color.

[0009] In another embodiment of the invention, the front exterior of the refrigerated medicine cabinet may include a small magnified mirror in a portion of the front exterior of the refrigerated medicine cabinet.

[0010] In another embodiment of the invention, the interior of the refrigerated medicine cabinet may come in various volumes to accommodate the needs of the user.

[0011] In yet another embodiment of the invention, the depth of the refrigerated medicine cabinet is sized to be appropriate for a bathroom.

[0012] In yet another embodiment of the invention, the refrigerated medicine cabinet may have a freezer compartment, or the entire interior may be a freezer.

[0013] In still yet another embodiment the shelving systems may come in various colors, such as silver and gold.
[0014] In a further embodiment the shelving systems may be "rails", glass, or clear or tinted plastic.

[0015] In a further embodiment the vertical spacing between the shelving systems may be adjustable.

[0016] These and other advantages of the invention will be further understood and appreciated by those skilled in the art by reference to the following written specification, claims and appended drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0017] The invention will now be described, by way of example, with reference to the accompanying drawings, in which:

[0018] FIG. 1 illustrates a perspective view of the refrigerated medicine cabinet from the front with the front door closed, in accordance with the inventive concept.

[0019] FIG. 2 illustrates a perspective view of the refrigerated medicine cabinet from the front with the front door open, in accordance with the inventive concept.

[0020] FIG. 3 illustrates a perspective view of the refrigerated medicine cabinet from the rear, in accordance with the inventive concept.

[0021] Like reference numerals refer to like parts throughout the various views of the drawings.

DETAILED DESCRIPTION OF REPRESENTATIVE EMBODIMENTS

[0022] The following detailed description is merely exemplary in nature and is not intended to limit the described embodiments or the application and uses of the described embodiments. As used herein, the word "exemplary" or "illustrative" means "serving as an example, instance, or illustration." Any implementation described herein as "exemplary" or "illustrative" is not necessarily to be construed as preferred or advantageous over other implementations. All of the implementations described below are exemplary implementations provided to enable persons skilled in the art to make or use the embodiments of the disclosure and are not intended to limit the scope of the disclosure, which is defined by the claims. For purposes of description herein, the terms "upper," "lower," "left," "rear," "right," "front," "vertical," "horizontal," and derivatives thereof shall relate to the invention as oriented in FIG. 1. Furthermore, there is no intention to be bound by any expressed or implied theory presented in the preceding technical field, background, brief summary or the following detailed description. It is also to be understood that the specific devices and processes illustrated in the attached drawings, and described in the following specification, are simply exemplary embodiments of the inventive concepts defined in the appended claims. Hence, specific dimensions and other physical characteristics relating to the embodiments disclosed herein are not to be considered as limiting, unless the claims expressly state otherwise.

[0023] FIG. 1 illustrates a front perspective view of the exterior of the refrigerated medicine cabinet 10. The refrigerated medicine cabinet 10 exterior illustrated in FIG. 1 includes a top side 12, left side 14, right side 16, bottom side 18 and front side 20. The refrigerated medicine cabinet includes a refrigerated portion 27 and a refrigeration unit 15. The top side 12 of the refrigerated medicine cabinet 10 refrigeration unit 15 includes refrigeration unit recessed ventilation ducts 22 and a thermostat (not shown). The top side 12 recessed ventilation ducts 22 exhaust warm air from the refrigeration unit 15. The refrigeration unit 15 includes a recessed channel 17 for enclosure of a power cord 19 to allow the refrigerated medicine cabinet 10 to be flush mounted or installed into a wall. The front side 20 of the refrigerated medicine cabinet 10 forms a door which may be selectively opened and closed to allow access to the interior of the refrigerated medicine cabinet 10. The front side 20 of the refrigerated medicine cabinet 10 may include a large mirror 24 (not shown), or may be a wood or painted finish. The front side 20 of the refrigerated medicine cabinet 10 may also include a small magnifying mirror 26. The front side 20 of the refrigerated medicine cabinet 10 may also include a knob 28 for opening the front side 20 door 21 of the refrigerated medicine cabinet 10. In lieu of a knob 28, particularly if the large mirror is installed on the front side 20 of the refrigerated medicine cabinet 10, front side interior magnet 23 (FIG. 2) and left side interior magnet 25 may be utilized to keep to door 21 of the front side 20 of the refrigerated medicine cabinet 10 closed when not in use

[0024] FIG. 2 illustrates a front perspective view of the interior of the refrigerated medicine cabinet 10 with the door 21 open. The refrigerated medicine cabinet 10 interior illustrated in FIG. 2 includes an upper 30, middle 35 and lower 40 shelving systems, although the invention is not limited to three shelving system. The upper shelving system 30 contains upper shelf 31, lower shelf 32 and vertical shelf partitions 33. The vertical partitions 33 connect the upper 31 and lower 32 shelves and may also serve as partitions on the lower shelf 32. Similarly, the middle shelving system 35 contains upper shelf 36, lower shelf 37 and vertical shelf partitions 38. The vertical partitions 37 connect the upper 36 and lower 37 shelves and may also serve as partitions on the lower shelf 37. The lower shelving system 40 contains upper shelf 41 and vertical shelf partitions 43. There is no lower shelf for the lower shelving system, as the base 42 of the interior of the refrigerated portion 27 of the refrigerated medical cabinet 10 serves that purpose. As for the above shelving systems, the vertical partitions 43 connect the upper 41 and lower base 42 shelves and may also serve as partitions on the lower base shelf 42. The shelving systems are supported by a series of elongated supports 45. The spacing between the upper 30, middle 35 and 40 shelving systems may be adjustable by sliding one, or more of the upper 30, middle 35 and lower 40 shelving systems out of one of the elongated supports 45 and into another elongated support 45.

[0025] FIG. 3 illustrates a rear perspective view of the exterior of the refrigerated medicine cabinet 10. The rear side 46 of the refrigerated medicine cabinet 10 is where the refrigeration unit 15 is installed. The refrigeration unit 15 is of conventional design, such as may be found in "mini-refrigerators" and will not be discussed in detail. The refrigeration unit 15 is attached to a rear portion of the refrigerated portion 27 of the refrigerated medicine cabinet 10. FIG.3 also illustrates the recessed channel 17 used to allow a power cord 19 to be routed outside the refrigeration unit 15 and the refrigerated medicine cabinet to be flush mounted to a wall. Figure 3 further illustrates recessed attachment points 47 on a rear portion of the refrigeration unit. These recessed attachment points allow the refrigerated medicine cabinet 10 to be attached to screws (not shown) installed slightly protruding from the wall where the refrigerated medicine cabinet is being installed.

[0026] In use of the refrigerated medicine cabinet 10, a suitable location in a bathroom wall near eye level and proximal an electrical outlet is located. Screws are mounted in this suitable location to match the pattern of the recessed attachment points 47 illustrated on FIG. 3. The refrigerated medicine cabinet is then securely mounted to the suitable location in the bathroom wall by aligning the recessed attachment points 47 with the

screws and then inserting the recessed attachment points 47 into the slightly protruding screws. The upper 30, middle 35 and lower 40 shelving systems are then spaced according to an individual's preference by inserting each shelving system in an appropriate shelving system support 45. The refrigerated medicine cabinet is then supplied power. Once power is supplied, medicine, cosmetics and other items requiring refrigeration may then be placed in an appropriate location on one of the shelving systems.

[0027] While the preferred embodiments of the invention have been described above, it will be recognized and understood that various modifications can be made in the invention and the appended claims are intended to cover all such modifications which may fall within the spirit and scope of the invention.

Claims

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1. A refrigerated medicine cabinet comprising:

an exterior with top, left, right, bottom, front and rear sides,

the refrigerated medicine cabinet including a refrigerated portion for storing medicine, cosmetics and other small items and a refrigeration unit, recessed ventilation ducts located on the top side of the refrigerated medicine cabinet refrigeration unit,

a door forming the front side,

an interior containing a plurality of shelving systems

each shelving system consisting of an upper shelf, a lower shelf and vertical partitions connecting the upper shelf and lower shelf on each shelving system.

- **2.** The refrigerated medicine cabinet of claim 1, wherein the front exterior of the refrigerated medicine cabinet has a large mirror.
- **3.** The refrigerated medicine cabinet of claim 1, wherein in a portion of the front exterior of the refrigerated medicine cabinet includes a small magnified mirror.
- **4.** The refrigerated medicine cabinet of claim 1, wherein the interior of the refrigerated medicine cabinet comes in various volumes to accommodate the needs of the user.
- **5.** The refrigerated medicine cabinet of claim 1, wherein the depth of the refrigerated medicine cabinet is sized to be appropriate for a bathroom.
- 6. The refrigerated medicine cabinet of claim 1, wherein the refrigerated medicine cabinet has a

freezer compartment.

7. The refrigerated medicine cabinet of claim 1, wherein the entire interior of the refrigerated medicine cabinet is a freezer.

8. The refrigerated medicine cabinet of claim 1, wherein the shelving systems comes in various colors, such as silver and gold.

8. The refrigerated medicine cabinet of claim 1, wherein the shelving systems is selected from one of the following "rails", glass, clear plastic, tinted plastic

9. The refrigerated medicine cabinet of claim 1, wherein the vertical spacing between the shelving systems is adjustable.

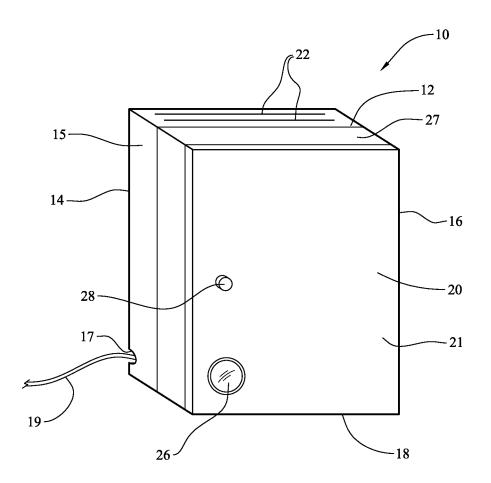


FIG. 1

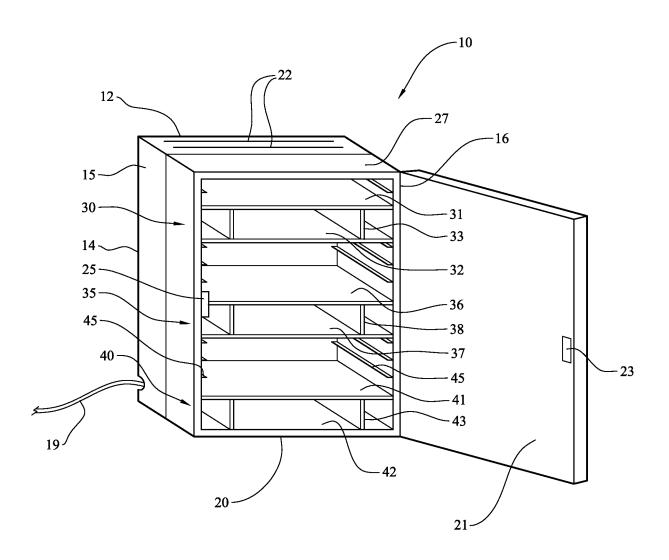


FIG. 2

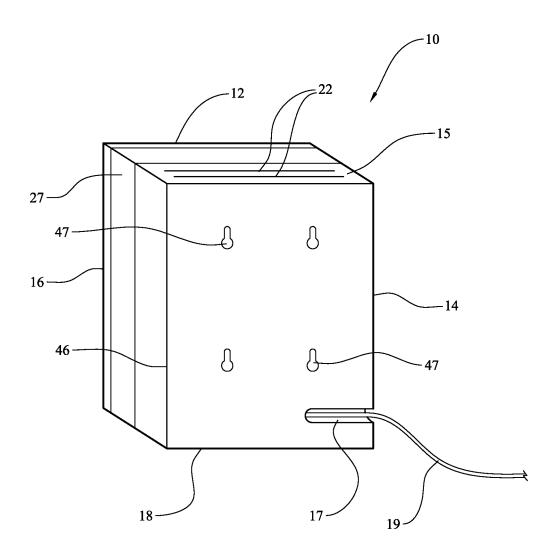


FIG. 3