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(54) **UNDER CUPBOARD HIDEAWAY CABINET**

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(57) **ABSTRACT**

An under cupboard hideaway cabinet comprises a first frame further comprised of two parallel side walls having two inwardly directed, opposing pins. A second frame sized to fit into the first frame and comprising two side walls having grooves on their outer faces. A slide-out tray capable of making a linear movement between the two side walls of the second frame. The pins of the first frame are located into the grooves of the second frame. The grooves are configured and sized to allow a movement of the second frame within the first frame comprising a linear movement component and a tilting movement component.

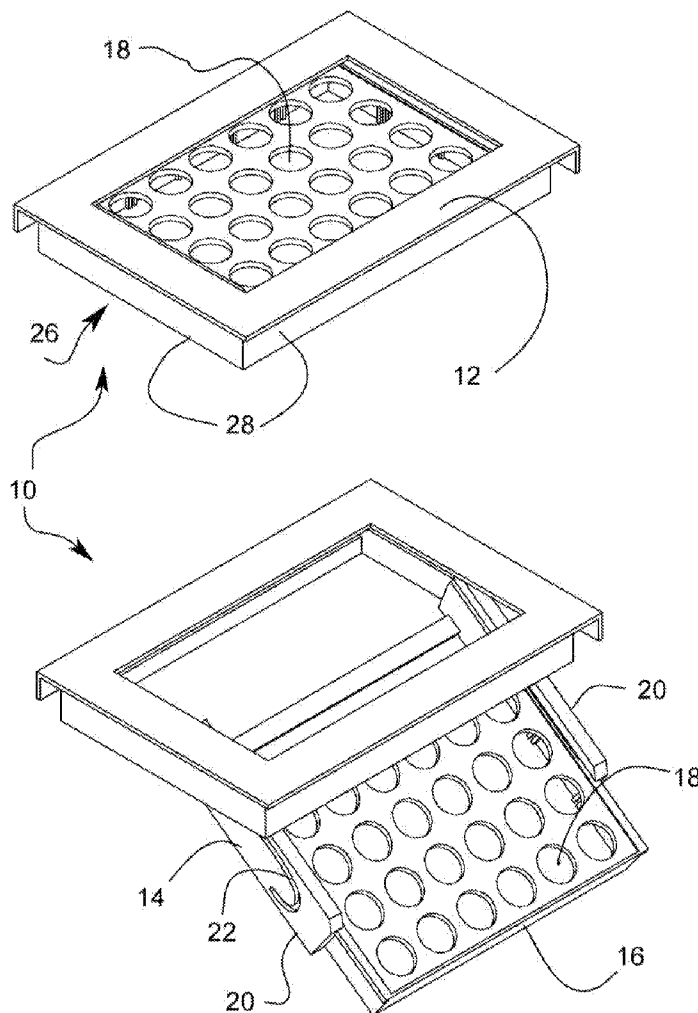


FIG. 1A

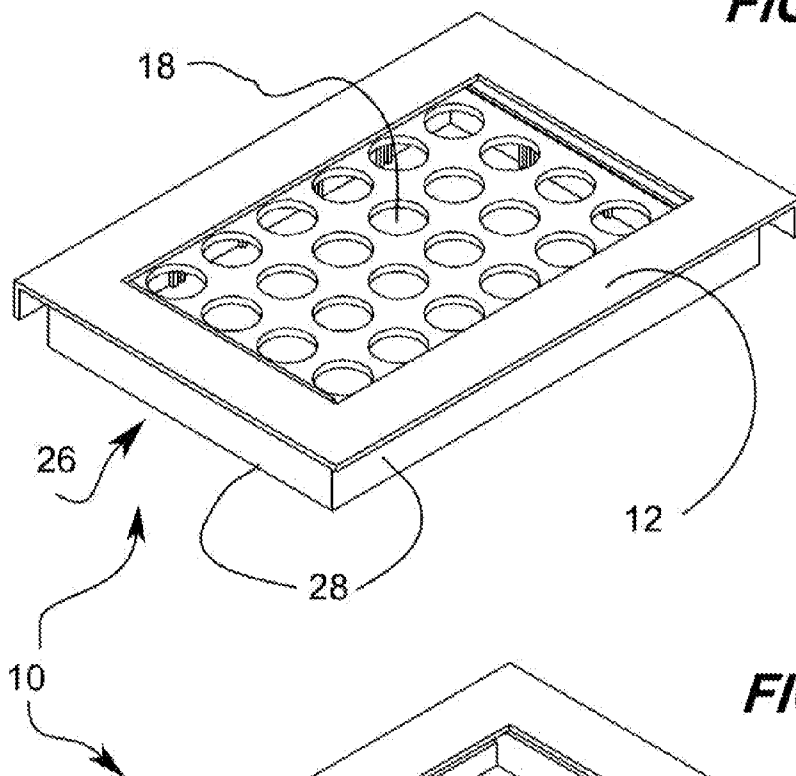


FIG. 1B

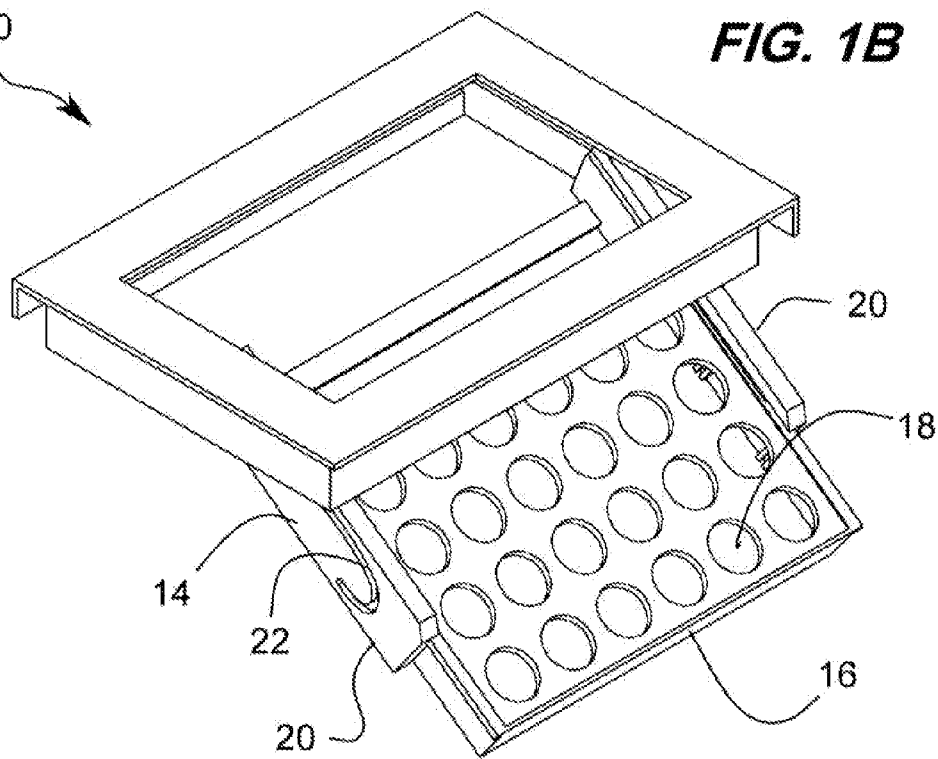


FIG. 2A

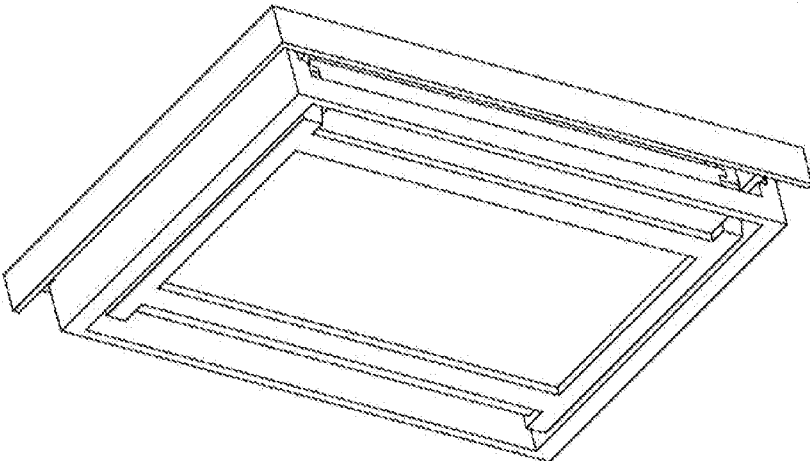


FIG. 2B

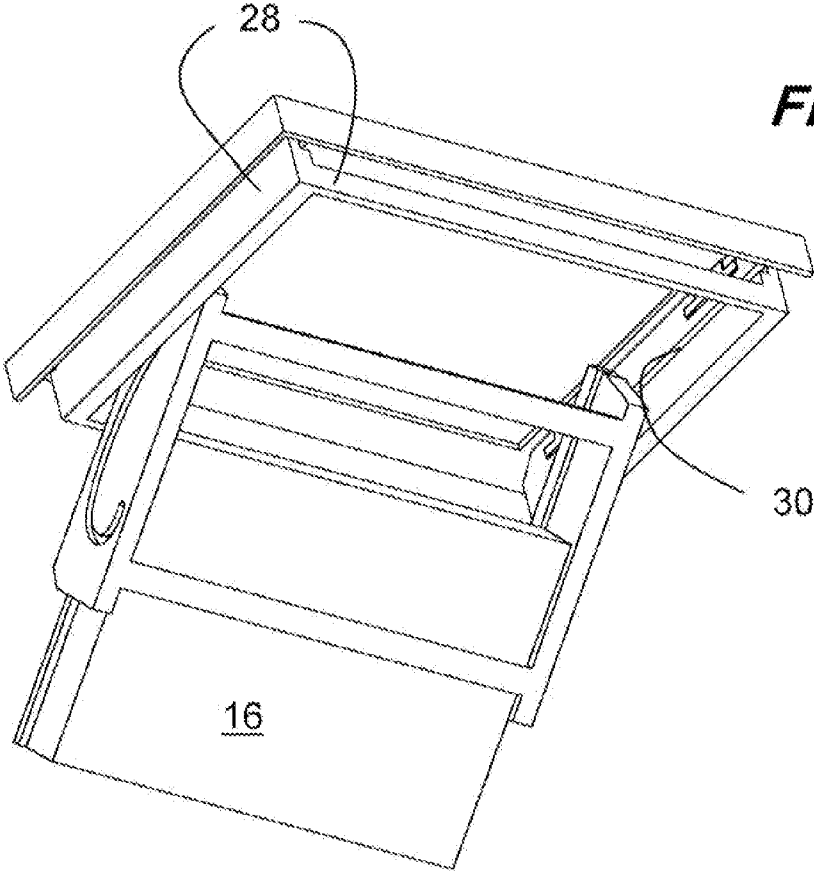
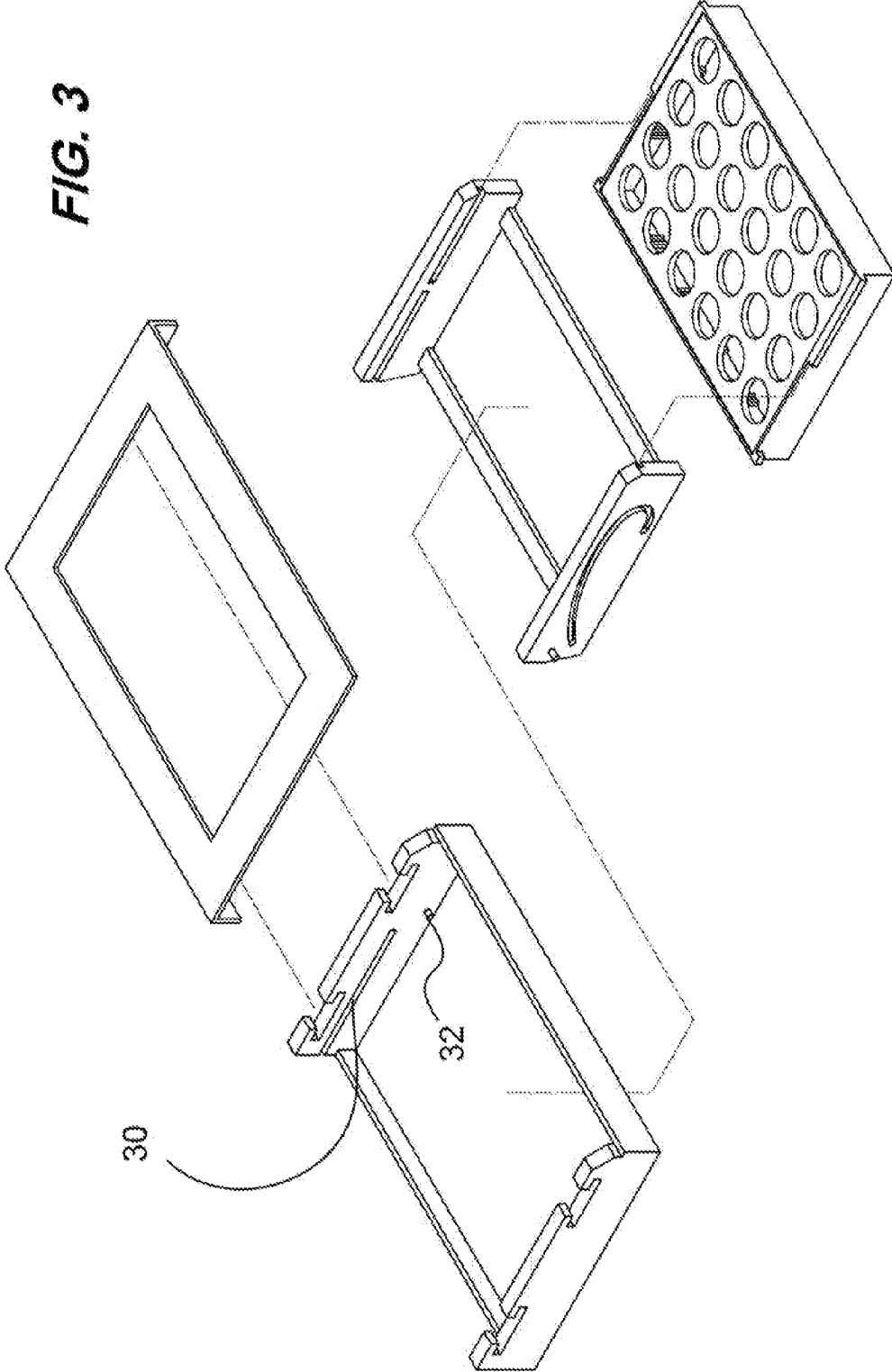


FIG. 3



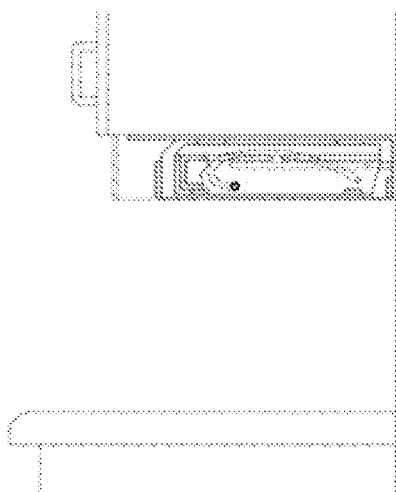


FIG. 4A



FIG. 4B

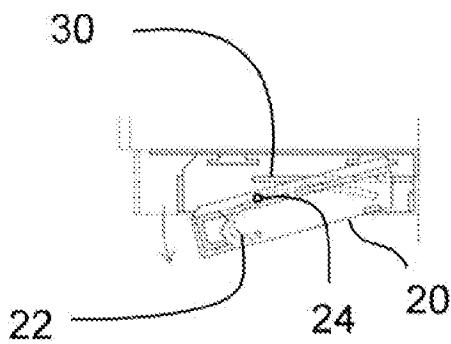


FIG. 4C

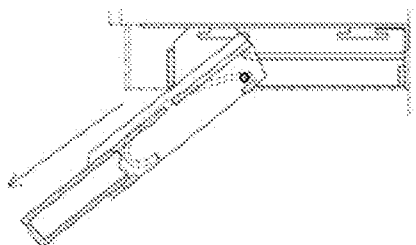


FIG. 4D

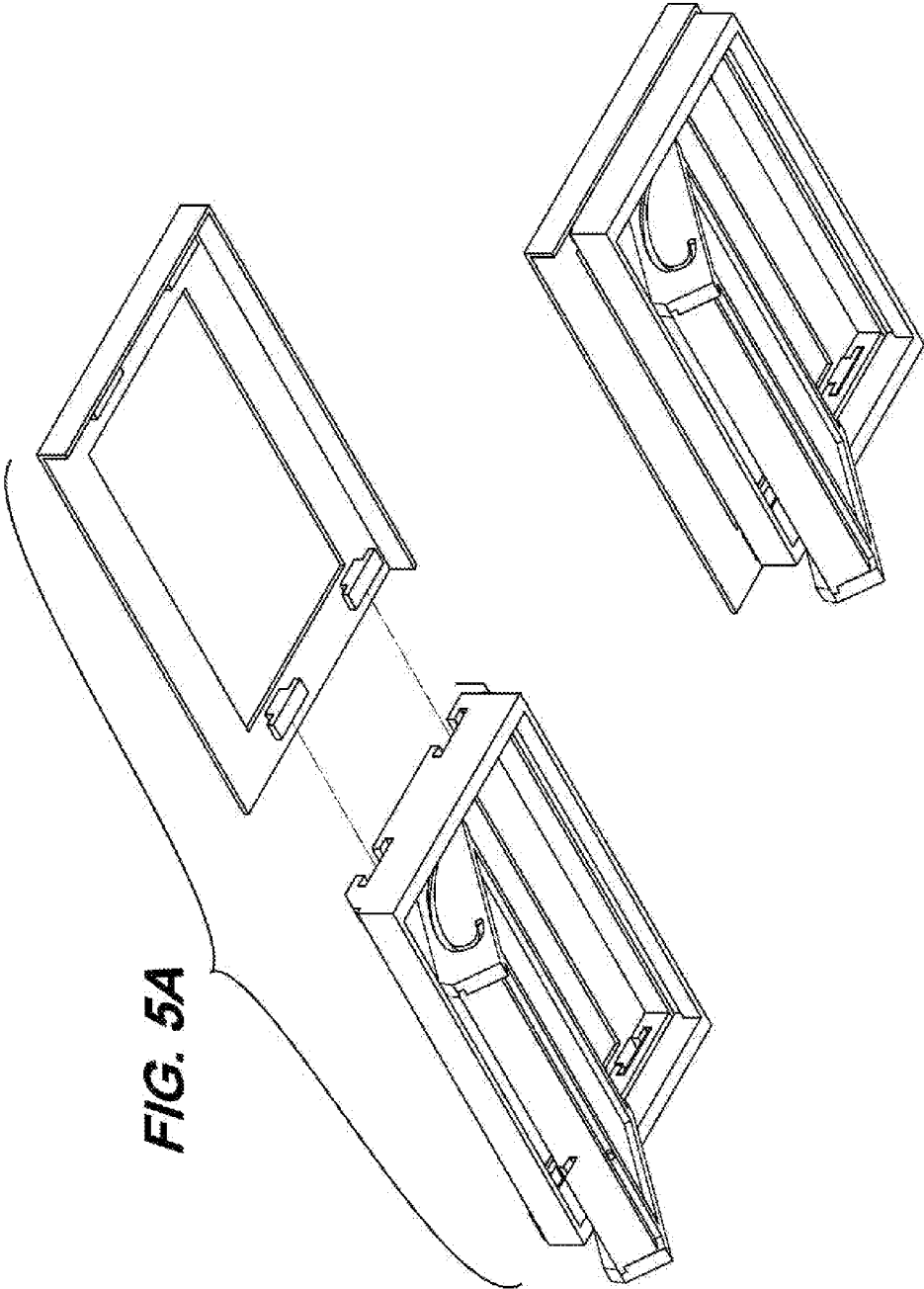
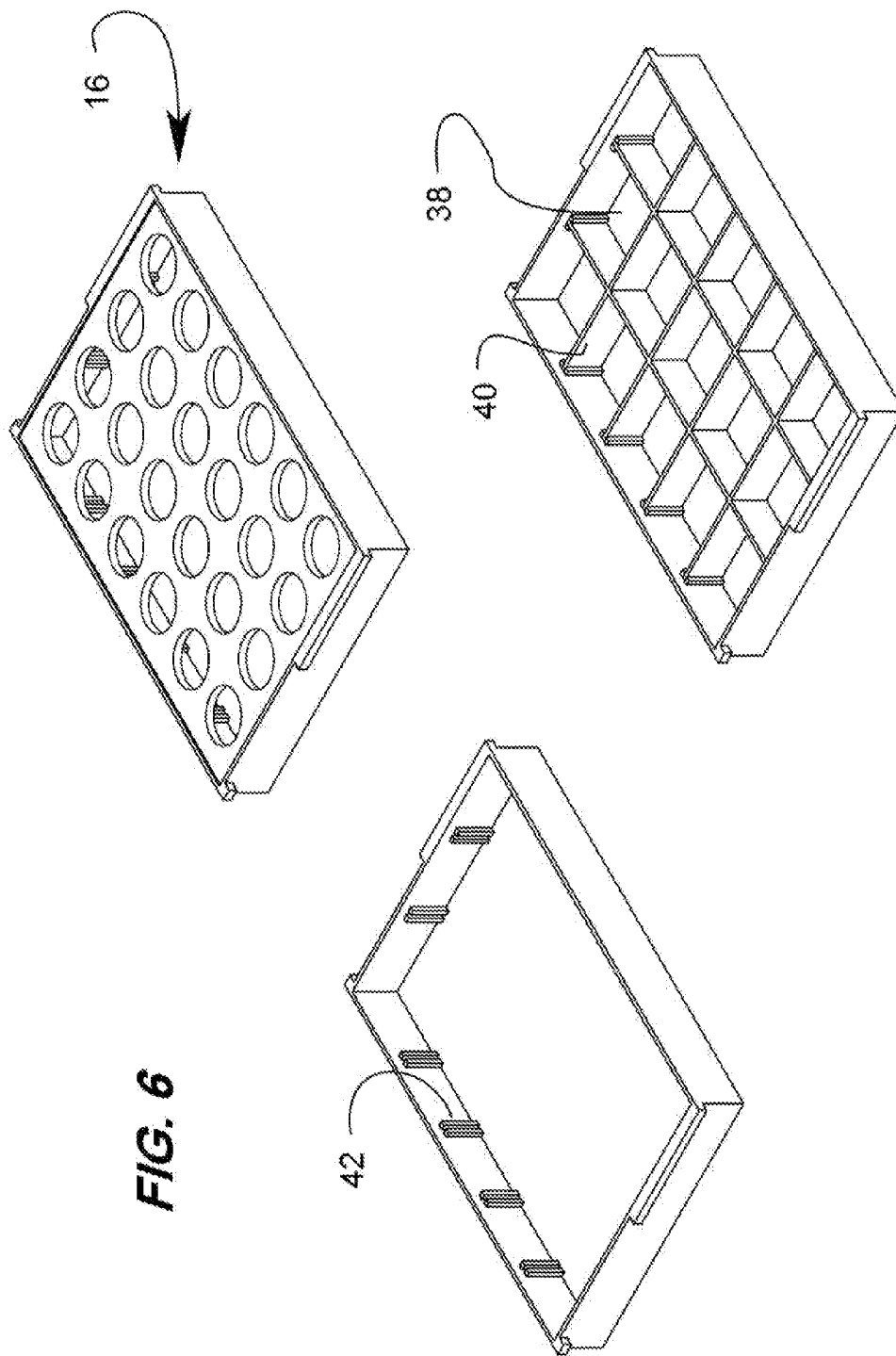


FIG. 5A

FIG. 5B



UNDER CUPBOARD HIDEAWAY CABINET

FIELD OF THE INVENTION

[0001] The present invention relates generally to storage cabinets but more particularly to an under cupboard hideaway cabinet.

BACKGROUND OF THE INVENTION

[0002] There are many types of storage cabinets including cabinets designed to fit under the upper cupboards in kitchens. Each is designed for specific purpose.

SUMMARY OF THE INVENTION

[0003] In view of the foregoing disadvantages inherent in the known devices now present in the prior art, the present invention, which will be described subsequently in greater detail, is to provide objects and advantages which are:

[0004] To provide for an under cupboard hideaway cabinet for use with small round containers such as for single coffee serving containers or spice jars.

[0005] In order to do so, the under cupboard hideaway cabinet comprises a first frame further comprised of two parallel side walls having two inwardly directed, opposing pins. A second frame sized to fit into the first frame and comprising two side walls having grooves on their outer faces. A slide-out tray capable of making a linear movement between the two side walls of the second frame. The pins of the first frame are located into the grooves of the second frame. The grooves are configured and sized to allow a movement of the second frame within the first frame comprising a linear movement component and a tilting movement component.

[0006] The second frame has outwardly directed, opposing pins on the side walls running in grooves on the inner faces of the first frame.

[0007] The grooves of the second frame are arc-shaped and describe a backwardly moving curve at the front end of the side walls.

[0008] The second frame moves within the first frame at least in a part of its track by way of gravity and moves in the opposite direction by way of force exerted by a user.

[0009] The grooves on the inner faces of the first frame are linear.

[0010] The tray has a plurality of round openings configured for inserting round objects into them, and is subdivided into a plurality of compartments.

[0011] The first frame has fixation elements for fixing the cabinet under a cupboard which are T-shaped brackets corresponding to notches in the side walls of the first frame.

[0012] There has thus been outlined, rather broadly, the more important features of the invention in order that the detailed description thereof that follows may be better understood, and in order that the present contribution to the art may be better appreciated. There are additional features of the invention that will be described hereinafter and which will form the subject matter of the claims appended hereto.

[0013] In this respect, before explaining at least one embodiment of the invention in detail, it is to be understood that the invention is not limited in its application to the details of construction and to the arrangements of the components set forth in the following description or illustrated in the drawings. The invention is capable of other embodiments and of being practiced and carried out in various ways. Also, it is to

be understood that the phraseology and terminology employed herein are for the purpose of description and should not be regarded as limiting.

[0014] As such, those skilled in the art will appreciate that the conception, upon which this disclosure is based, may readily be utilized as a basis for the designing of other structures, methods and systems for carrying out the several purposes of the present invention. It is important, therefore, that the claims be regarded as including such equivalent constructions insofar as they do not depart from the spirit and scope of the present invention.

[0015] These together with other objects of the invention, along with the various features of novelty which characterize the invention, are pointed out with particularity in the claims annexed to and forming a part of this disclosure. For a better understanding of the invention, its operating advantages and the specific objects attained by its uses, reference should be made to the accompanying drawings and descriptive matter which contains illustrated preferred embodiment of the invention.

BRIEF DESCRIPTION OF THE DRAWINGS

[0016] FIGS. 1a-b Isometric views of the invention with tray closed and open.

[0017] FIGS. 2a-b Isometric views as in FIG. 1 but favoring the underside.

[0018] FIG. 3 Exploded view of the invention.

[0019] FIGS. 4a-d Side cutaway views of the operating process.

[0020] FIGS. 5a-b Exploded view of the invention isometric views showing the insertion of the casing member into the bracket

[0021] FIG. 6 Isometric view of the components forming the tray.

DETAILED DESCRIPTION

[0022] An under cupboard hideaway cabinet (10) has a fixed frame (12) and a movable frame (14). The movable frame (14) has a slide out tray (16) having a plurality of round openings (18) configured for inserting round objects into them.

[0023] The movable frame (14) has two parallel sides (20) and each one has a groove (22) and a blocker pin (24).

[0024] The fixed frame (12) has a casing member (26), having four walls (28) wherein two of the four walls (28), are parallel to each other, and each of those two walls (28) has a track member (30) on its interior face as well as a stopper peg (32).

[0025] A hanging bracket (34) interfaces between the underside of a cupboard and the casing member (26). The hanging bracket (34) has a plurality of "T" hooks (36) which engage complementary "T" notches (38) forming an integral part of the casing member (26). Sliding the casing member (26) sideways engages the "T" notches (38) into the "T" hooks (36).

[0026] Typically, the hanging bracket (34) is mechanically fastened to the underside of the cupboard and then the casing member (26) is slid until it hits a side segment (36) of the hanging bracket (34).

[0027] The tray (16) is subdivided into a plurality of compartments (38) formed by assembling partition members (40) inserted into partition channels (42).

[0028] In order to use, an intended user (not shown) pushes slightly on the movable frame (14), as seen in FIG. 4a, until the stopper peg (32) reaches a tight curve (38) forming part of the groove (22). At this point, the movable frame (14) drops down, as seen in FIG. 4b. Then, the intended user pulls the movable frame (14) forward (towards him) until the stopper peg (32) reaches the end of the groove (22), as per FIG. 4c.

[0029] Also, in order to constrain the range of motion of the movable frame (14) so that it does not drop down more than about 45 degrees, the blocker pin (24), which slides inside the track member (30), reaches the end of the track member (30), and thus blocks any further moves from the movable tray (14). At this point, gravity slides out the tray (16) and the intended user can easily access the content (34).

[0030] As to a further discussion of the manner of usage and operation of the present invention, the same should be apparent from the above description. Accordingly, no further discussion relating to the manner of usage and operation will be provided.

[0031] With respect to the above description then, it is to be realized that the optimum dimensional relationships for the parts of the invention, to include variations in size, materials, shape, form, function and manner of operation, assembly and use, are deemed readily apparent and obvious to one skilled in the art, and all equivalent relationships to those illustrated in the drawings and described in the specification are intended to be encompassed by the present invention.

[0032] Therefore, the foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the invention.

1. Under cupboard hideaway cabinet comprising a first frame further comprised of two parallel side walls having two

inwardly directed, opposing pins; a second frame sized to fit into said first frame and comprising two side walls having grooves on their outer faces; a slide-out tray capable of making a linear movement between said two side walls of said second frame; said pins of said first frame located into said grooves of said second frame; said grooves configured and sized to allow a movement of said second frame within said first frame comprising a linear movement component and a tilting movement component.

2. Under cupboard hideaway cabinet as in claim 1, wherein said second frame has outwardly directed, opposing pins on said side walls running in grooves on the inner faces of said first frame.

3. Under cupboard hideaway cabinet as in claim 1, wherein said grooves of the second frame are arc-shaped.

4. Under cupboard hideaway cabinet as in claim 1, wherein said grooves of said second frame describe a backwardly moving curve at the front end of said side walls.

5. Under cupboard hideaway cabinet as in claim 1, wherein said second frame moves within the first frame at least in a part of its track by way of gravity and moves in the opposite direction by way of force exerted by a user.

6. Under cupboard hideaway cabinet as in claim 1, wherein said grooves on the inner faces of said first frame are linear.

7. Under cupboard hideaway cabinet as in claim 1, wherein said tray has a plurality of round openings configured for inserting round objects into them.

8. Under cupboard hideaway cabinet as in claim 1, wherein said tray is subdivided into a plurality of compartments.

9. Under cupboard hideaway cabinet as in claim 1, wherein said first frame has fixation elements for fixing the cabinet under a cupboard.

10. Under cupboard hideaway cabinet as in claim 1, wherein said fixation elements are T-shaped brackets corresponding to notches in said side walls of said first frame.

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