

[54] **HINGE DEVICE FOR DUST COVER**

[75] Inventor: **Mykola Dsjuba**, Fort Wayne, Ind.

[73] Assignee: **The Magnavox Company**, Ft. Wayne, Ind.

[22] Filed: **Dec. 1, 1972**

[21] Appl. No.: **311,060**

Primary Examiner—Jordan Franklin

Assistant Examiner—Kenneth J. Dorner

Attorney, Agent, or Firm—Thomas A. Briody; Richard T. Seeger; William W. Holloway, Jr.

[52] **U.S. Cl.**..... 220/331, 16/171, 220/337, 312/8, 312/284, 220/335

[51] **Int. Cl.**..... **A47b 81/06**

[58] **Field of Search** 16/171; 220/31 R, 30, 315; 217/56, 57; 312/316, 8, 284, 285; 220/38

[56] **References Cited**

UNITED STATES PATENTS

2,611,509	9/1952	Fine	220/31 R
2,746,081	5/1956	Gershen	16/171
2,855,259	10/1958	Raschke	312/316
3,245,574	4/1966	Zimmermann et al.	220/30

FOREIGN PATENTS OR APPLICATIONS

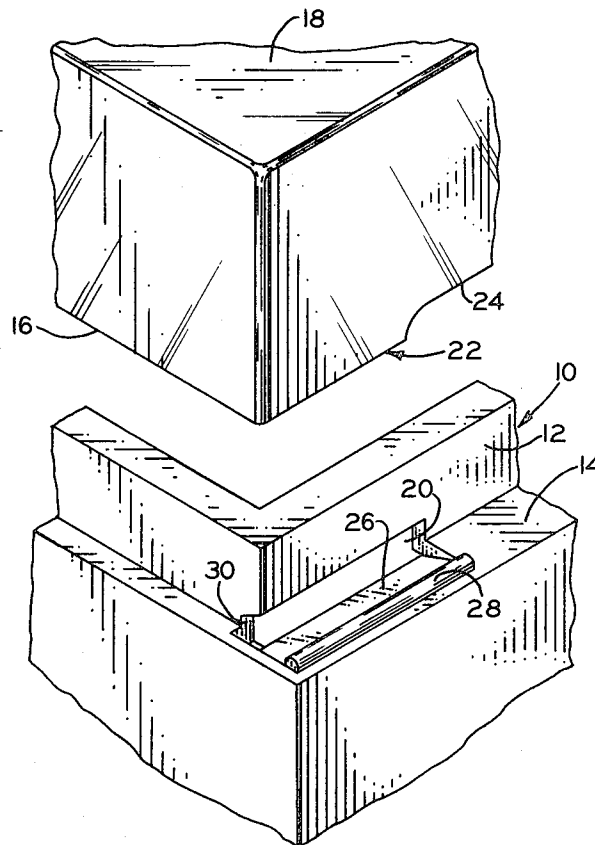
281,898	3/1962	Netherlands	220/31
---------	--------	-------------------	--------

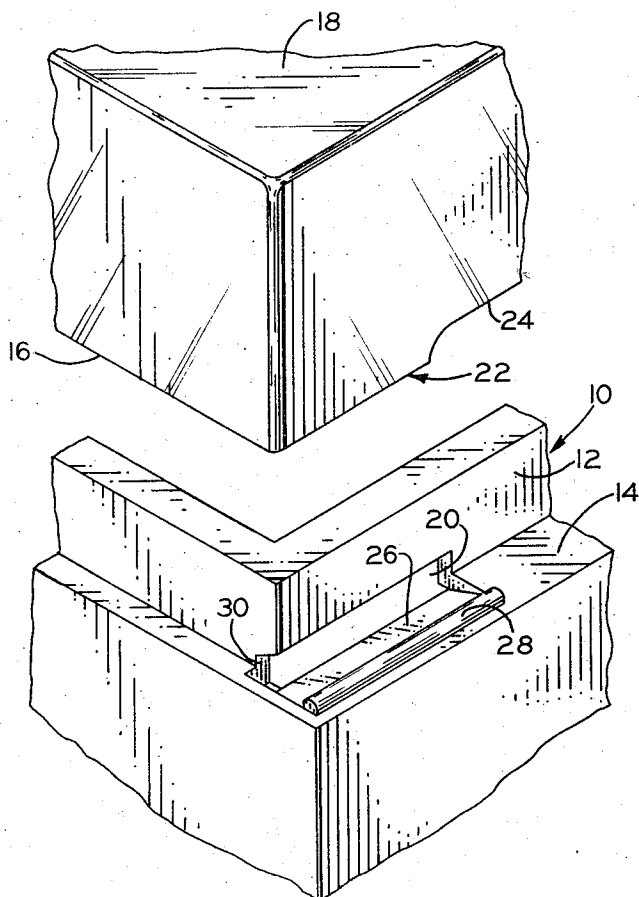
[57]

ABSTRACT

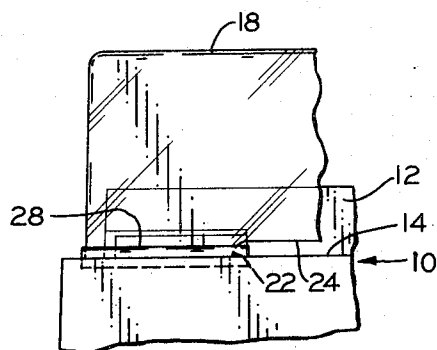
An article, such as the cabinet of a record changer, is provided with a wall which faces outwardly and projecting outwardly from the wall is a ledge on which the lower rim of a dust cover rests. Cooperating elements of a hinge arrangement are formed on the lower edge of the rim and on the wall of the article so that the dust cover can be tilted upwardly to expose the top of the article. Cooperating elements of an abutment arrangement also stop the dust cover in a tilted position on the article so that it is supported with the top of the article exposed.

10 Claims, 6 Drawing Figures

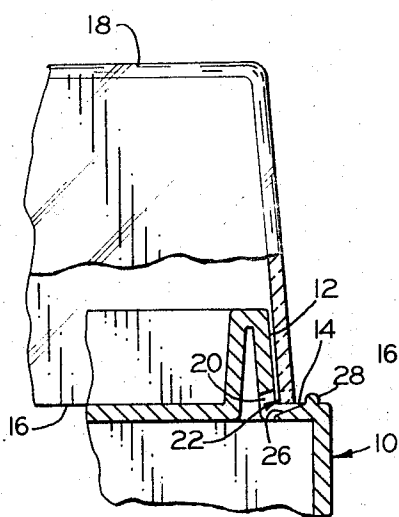




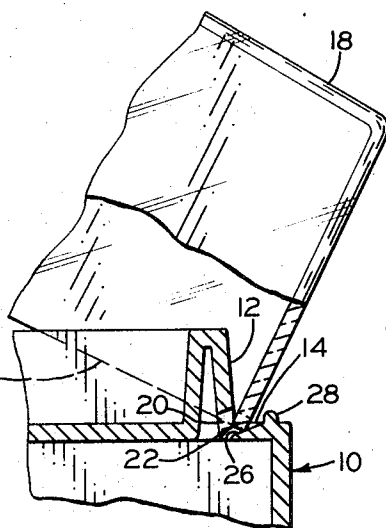
F 1 G 1



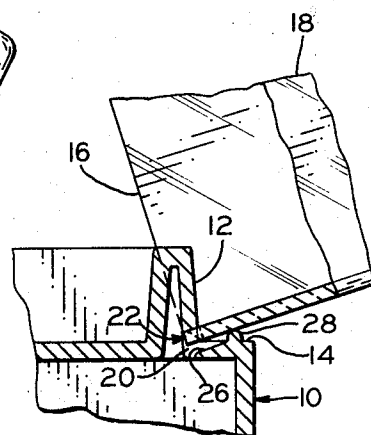
F 1 G 2



F 1 G 3



F 1 G 4

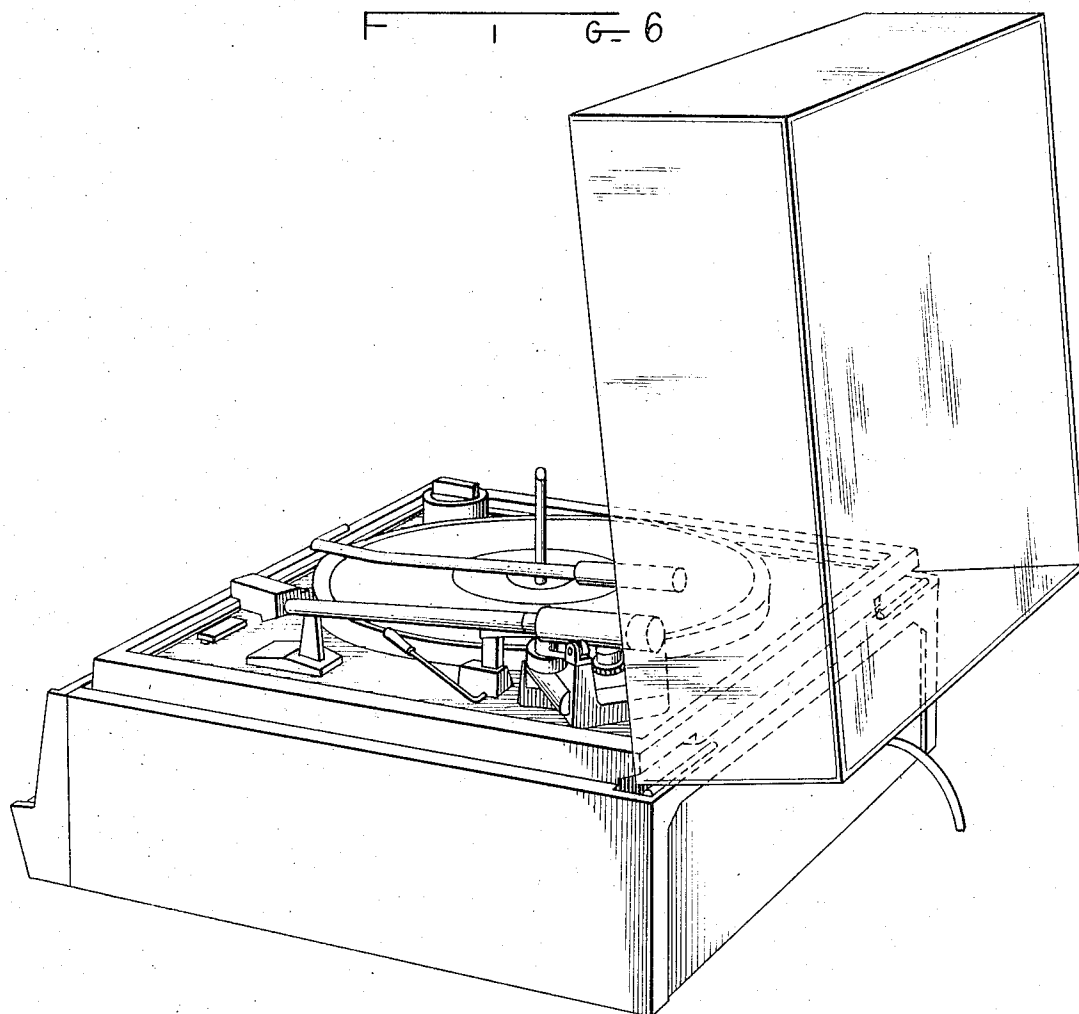


F 1 G 5

PATENTED NOV 26 1974

SHEET 2 OF 2

3,850,342



HINGE DEVICE FOR DUST COVER

The present invention relates to a hinge arrangement for hingedly connecting two parts, such as an article and a dust cover therefor.

A particular article with which a dust cover is employed is the cabinet of a record changer. In general, the cabinet of a record changer has the turntable and the pick-up arm and the controls on the top wall and has an outwardly facing peripheral wall. The peripheral wall may be provided with an outwardly protruding ledge and this ledge is adapted for supportingly engaging the rim of a dust cover. Ordinarily, with such arrangements, the dust cover is completely removed to expose the turntable for receiving records and this can represent an inconvenience because the dust cover must be deposited somewhere after it is removed from the record changer.

With the foregoing in mind, a primary objective of the present invention is the provision of a hinging arrangement for hingedly connecting a dust cover on an article such as the cabinet of a record changer.

Another object is the provision of an extremely simple and inexpensive hinging arrangement of the nature referred to and which, furthermore, supports the dust cover in upwardly tilted position when it has been raised to expose the upper surface and turntable of the record changer.

Still a further object of the present invention is the provision of a hinging arrangement of the nature referred to in which the dust cover can be completely removed from the cabinet of the record changer merely by lifting the dust cover, or as the hinging device becomes operative when the dust cover is tilted on the record changer.

The foregoing objects as well as still other objects and advantages of the present invention will become more apparent upon reference to the following detailed specification taken in connection with the accompanying drawings, in which:

FIG. 1 is a fragmentary perspective view showing a corner of a record changer cabinet and a dust cover therefor.

FIG. 2 is a fragmentary elevational view looking in at the record changer cabinet and the dust cover therefor at one corner.

FIGS. 3, 4 and 5 are sectional views showing the dust cover in closed, partly tilted and completely tilted positions, respectively.

FIG. 6 is a perspective view showing the entire record changer cabinet and its associated dust cover.

BRIEF SUMMARY OF THE INVENTION:

According to the present invention, a record changer cabinet, or the like, has an upwardly facing ledge extending about the outwardly facing wall for supportingly engaging the bottom edge of the rim of a dust cover. The wall is provided with apertures on one side at the juncture of the wall with the ledge, while the dust cover is provided with protruding leg portions receivable in the apertures. The dust cover is adapted for resting on the ledge and can be removed from the cabinet by straight upward movement thereof but, upon tilting of the dust cover about the edge adjacent the aforementioned apertures, the leg portions of the dust cover will enter the apertures and define a hinge axis about which the dust cover can be tilted on the cabinet.

Cooperating elements of abutment means are provided on the cabinet and on the dust cover to support the dust cover in a predetermined tilted position on the cabinet.

DETAILED DESCRIPTION OF THE INVENTION:

Referring to the drawings somewhat more in detail, reference numeral 10 generally indicates an article such as the cabinet for a record changer. This article has an outwardly facing wall 12 and formed on the wall and protruding laterally outwardly therefrom below the upper edge of the wall is a ledge 14. The ledge 14 is adapted for supportingly engaging the lower edge 16 of a dust cover 18 which is adapted for being placed on the article so as to telescopically engage the upper region of wall 12 and to enclose and protect the top portion of the cabinet. The cabinet and the dust cover are rectangular when viewed in plan.

According to the present invention, a hinge arrangement is provided about which the dust cover can be tilted from closed to open position and this hinge arrangement takes the form of apertures 20 formed along at least one side of the wall 12 adjacent the juncture thereof with ledge 14 and which apertures are adapted for receiving the dependent leg portions 22 formed along the adjacent bottom edge, or rim, of the dust cover as, for example, by forming the undercut 24 therein.

Normally, as mentioned, the cabinet is substantially rectangular when viewed in plan and the dust cover 18 is of a corresponding shape and can be set down directly over the cabinet with the rim 16 resting on the ledge. The top cover can thus be completely removed from the cabinet by merely lifting the dust cover vertically.

However, the dust cover can also be tilted upwardly about the edge containing the legs 22 and when this is done the legs will slide down the inclined ramps 26 leading upwardly and outwardly from the bottoms of apertures 30. When the dust cover reaches a predetermined tilted position, the legs 22 will engage underneath the top walls of the apertures 30, while the outer side of the dust cover will rest on top of the abutment ribs 28 formed on the ledge 14 at the outer ends of the ramps 26. When the cover is tilted down, the legs 22 ride up the ramps and the cover returns to the starting position thereof.

It will be understood that the apertures 20, as shown, consist of an aperture adjacent each end of the respective side of the cabinet but could include one or more further apertures distributed along the respective side of the cabinet. Also, apertures could be disposed along one or more other sides of the cabinet, if so desired.

Each aperture at the end of the cabinet wall, it will be noted, extends along the respective side wall of the cabinet at the ends and into the adjacent side wall of the cabinet as indicated at 30 in FIG. 1, and this permits the dust cover to be relatively simply formed merely by providing the undercut 24 in the side thereof.

FIGS. 3 through 5 show the dust cover in various positions. The dust cover is resting in idle position in FIG. 3; while in FIG. 4 the dust cover is shown in partly tilted position with the legs 22 thereof sliding downwardly along ramps 26; while FIG. 5 shows the dust cover in completely outwardly tilted position with the legs 22 engaging the top walls of the apertures 20 and with the

outer side of the dust cover supportingly engaged by the abutment ribs 28 formed on the ledge 14 of the cabinet.

It will be apparent from the foregoing that the present invention proposes an extremely simple and inexpensive arrangement for providing a hinged joint between a dust cover and an article on which it rests, specifically between a dust cover and the cabinet of a record changer. The cabinet of the record changer and the dust cover, as well, can be molded of plastic materials and the cooperating elements of the hinge arrangement and the abutment arrangement can be molded directly in the cabinet and dust cover, whereby no machining or other parts are required to provide for the above described hinge arrangement.

Modifications may be made within the scope of the appended claims.

What is claimed is:

1. In a record changer cabinet, the combination comprising a first member having a generally vertical outwardly facing wall, said wall having an upper edge and an upwardly facing ledge formed on said wall, said ledge protruding outwardly from said wall below said upper edge and extending in a horizontal direction, a second member having a downwardly extending rim resting on said ledge when said cabinet is in a closed position, hinge means including first and second cooperating elements, said first and second cooperating elements being normally disengaged so that said cabinet may be readily opened by straight vertical movement of one of said members away from the other of said members when said members are in the closed position, said first element being formed on a mating elongated section of said wall in the region of said ledge, said second element being formed on an elongated section of said rim, said ledge having a ramp means disposed adjacent to said first element and inclined downwardly toward said first element, said ramp means being normally disengaged from said second element and coactable therewith to cam said second element into engaged cooperation with said first element, said cooperating first and second elements being engageable in response to tilting of said second member from its closed position to an open position relative to said first member for defining a pivot region about which said second member is pivotal on said first member between closed and open positions.

2. The combination according to claim 1 which includes cooperating elements of abutment means on said members operable to limit said pivotal movement of said second member on said first member.

3. The combination according to claim 2 in which said elements of abutment means comprise regions of said members which interengage in a predetermined tilted position of said second member.

4. In a record changer cabinet, the combination comprising a first member having a generally vertical outwardly facing wall, said wall having an upper edge and an upwardly facing ledge formed on said wall, said ledge protruding outwardly from said wall below said upper edge and extending in a horizontal direction, said second member having a downwardly extending rim resting on said ledge when said cabinet is in a closed position, hinge means including normally disengaged cooperating elements formed on an elongated section of said rim and on a mating elongated section of said wall in the region of said ledge, said elements being en-

gageable in response to tilting of said second member for defining a pivot region about which said second member is pivotal on said first member to an open position, said elements of said hinge means comprising an aperture means formed in said first member at the juncture of said ledge and said wall, and projection means on said rim of said second member receivable in said aperture means upon tilting of said second member on said first member.

5. In a record changer cabinet, the combination comprising a first member having a generally vertical outwardly facing peripheral wall, said wall having an upper edge and an upwardly facing ledge formed on said wall, said ledge protruding outwardly from said wall below said upper edge and extending substantially completely around said peripheral wall in a horizontal direction, said second member having a downwardly extending rim resting on said ledge when said cabinet is in a closed position, hinge means including normally disengaged cooperating elements formed on an elongated section of said rim and on a mating elongated section of said wall in the region of said ledge, said elements being engageable in response to tilting of said second member for defining a pivot region about which said second member is pivotal on said first member to an open position, said elements of the hinge means comprising at least one pair of apertures disposed in spaced relation and formed at the juncture of said ledge and said wall, and regions of said rim of said second member which are receivable in said apertures upon tilting of said second member on said first member.

6. In combination: first and second members which when viewed from above are substantially rectangular, said first member having a generally vertical outwardly facing peripheral wall which includes a plurality of angularly related side walls, said peripheral wall having an upper edge and an upwardly facing ledge formed on said wall, said ledge protruding outwardly from said wall below said upper edge and extending in a horizontal direction substantially completely around said peripheral wall, said second member having a downwardly extending rim telescopically engaging said first member from above and resting on said ledge, hinge means including normally disengaged cooperating elements formed on said rim and on said wall in the region of said ledge, said elements comprising apertures formed in one side wall of said first member at the juncture thereof with said ledge and with adjacent side walls, each aperture being slit-like and parallel to the plane of said ledge, said elements also comprising projections formed on the rim of said second member adjacent said apertures and receivable in said apertures upon tilting of said second member about the edge of the rim thereof which is adjacent the said one side wall, said elements being engageable in response to tilting of said second member for defining a pivot region about which said second member is pivotal on said first member.

7. The combination according to claim 6 in which said projections on said rim are formed by relieving the region of the rim disposed between the said apertures.

8. The combination according to claim 6 in which said ledge is formed with ramp means which incline downwardly toward said apertures to guide said projections into said apertures when said second member is tilted on said first member.

5

9. The combination according to claim 6 which includes cooperating elements of abutment means on said members which engage in such tilted position of said second member that the center of gravity thereof is disposed laterally outwardly beyond at least the region of engagement of said projections with said apertures.

6

10. The combination according to claim 8 in which said ledge comprises upwardly extending protruberances at least at the outer ends of said ramp means which engage and support said second member in a predetermined maximum tilted position on said first member.

* * * * *

10

15

20

25

30

35

40

45

50

55

60

65