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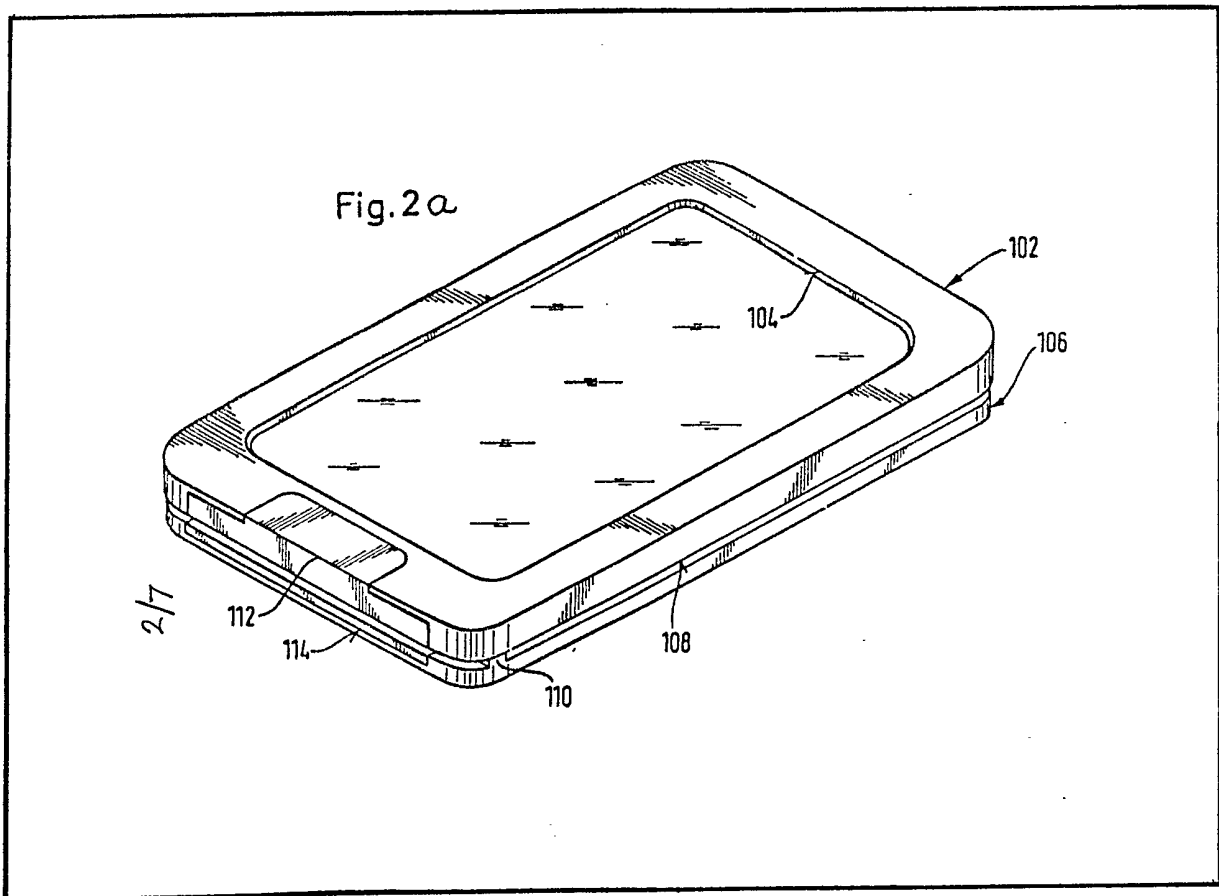
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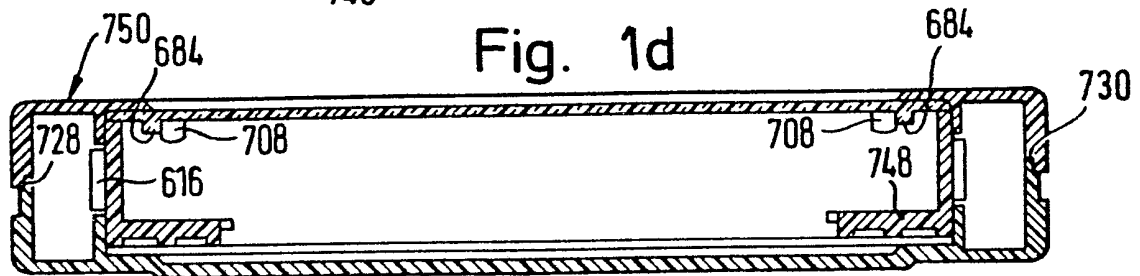
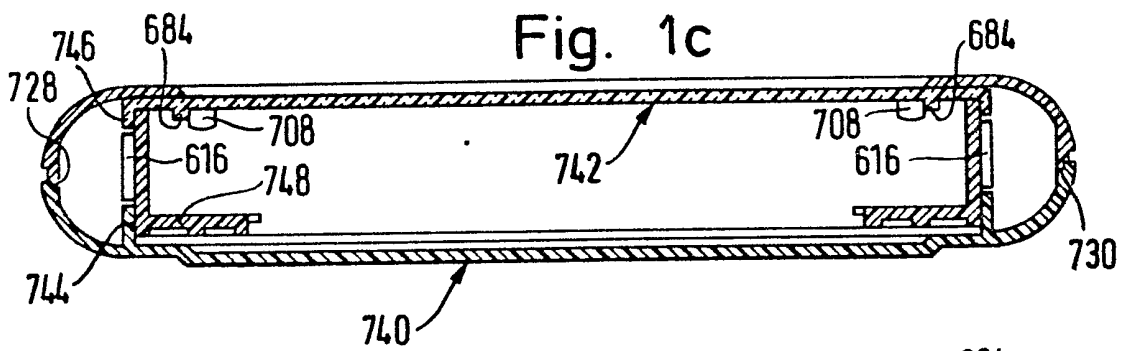
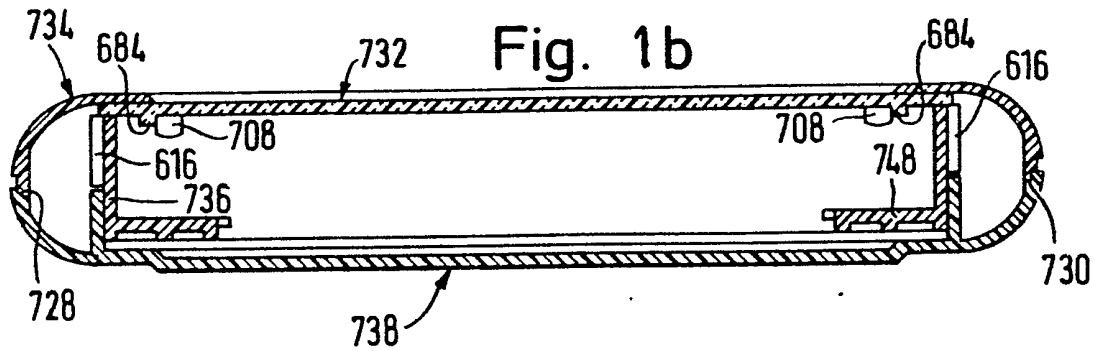
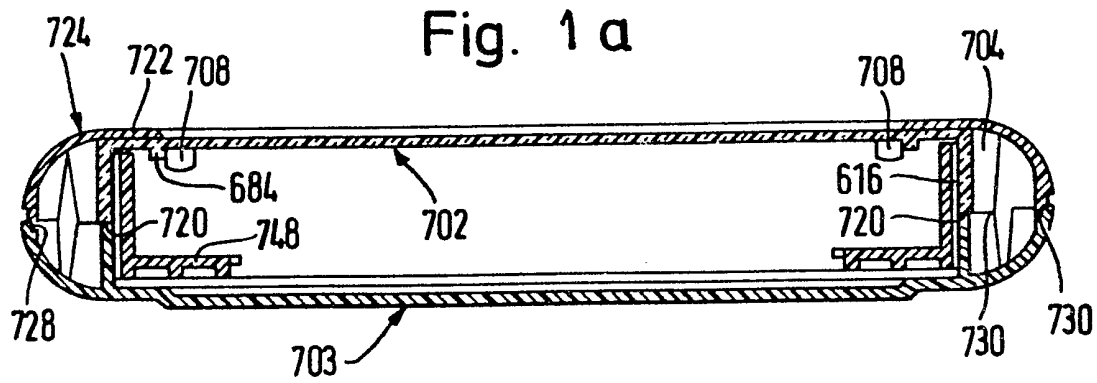
(54) Container for Pictures Having  
Similar Formats

(57) A picture viewing device in accordance with UK Patent Application GB 2049627A has a viewing window whose edge is spaced inwardly from the overall periphery of the device by a significant substantially uniform distance and is provided internally with centering elements to align at least the uppermost one of a stack of pictures with the window when the device is closed. A pivotable foot is provided for standing the device on edge for display.



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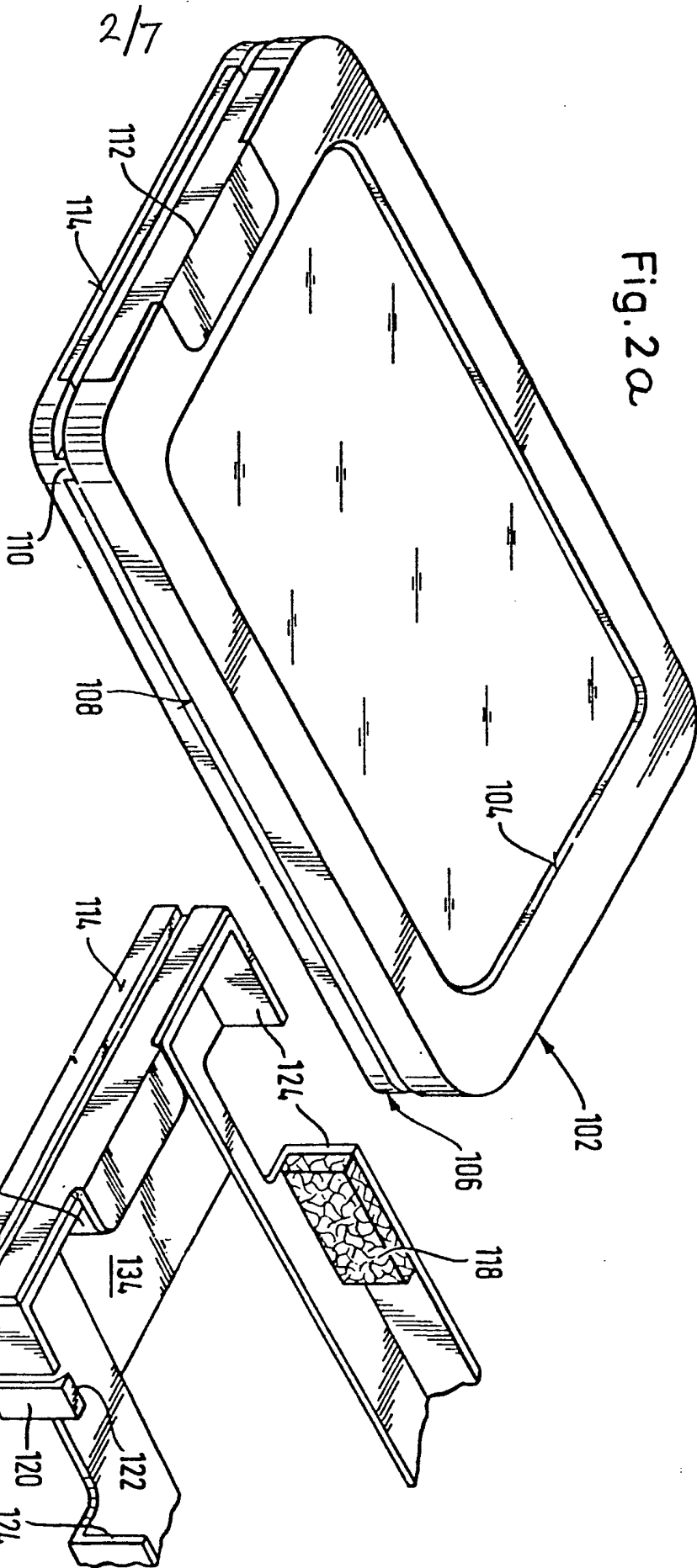
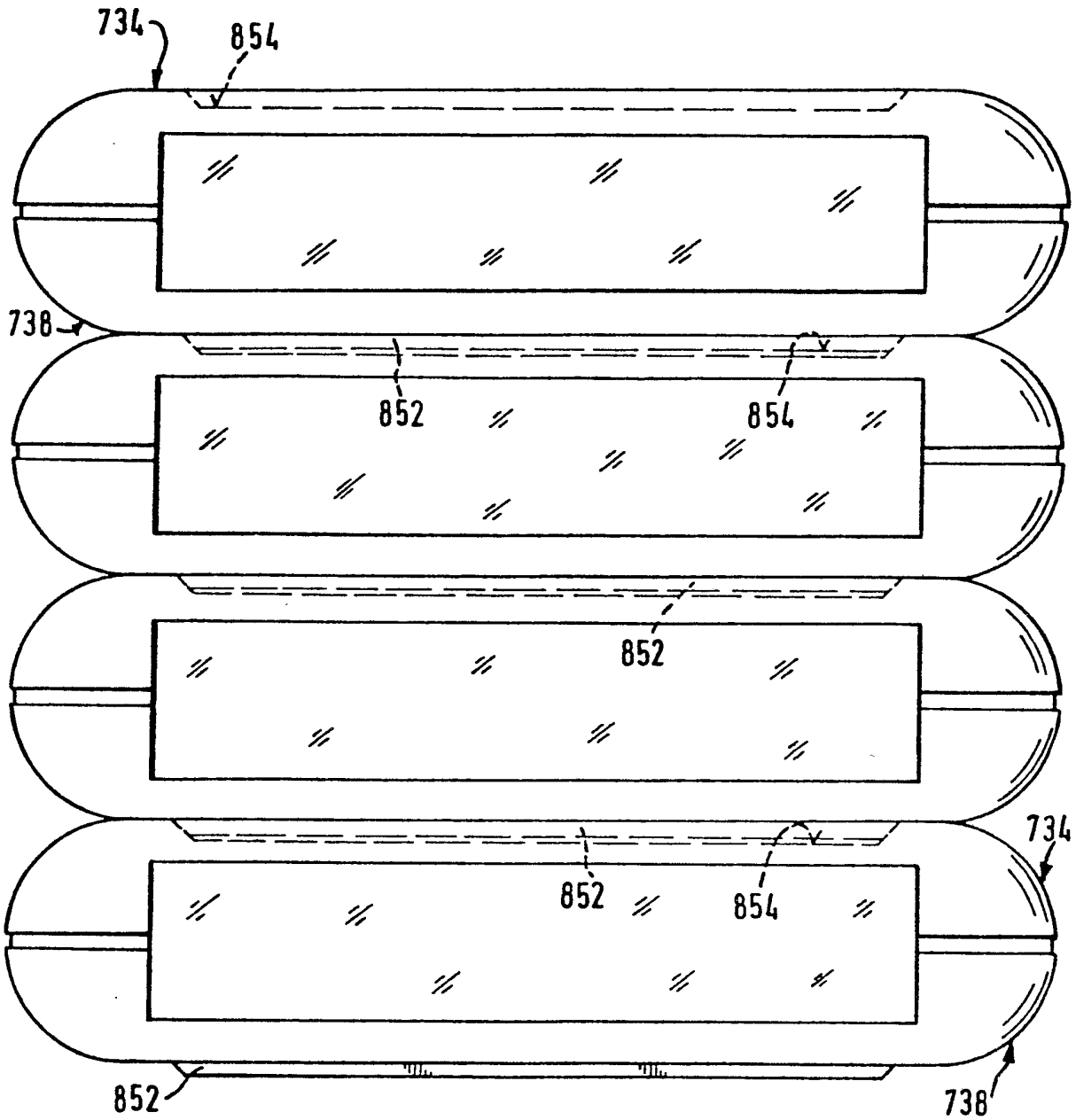


Fig. 3



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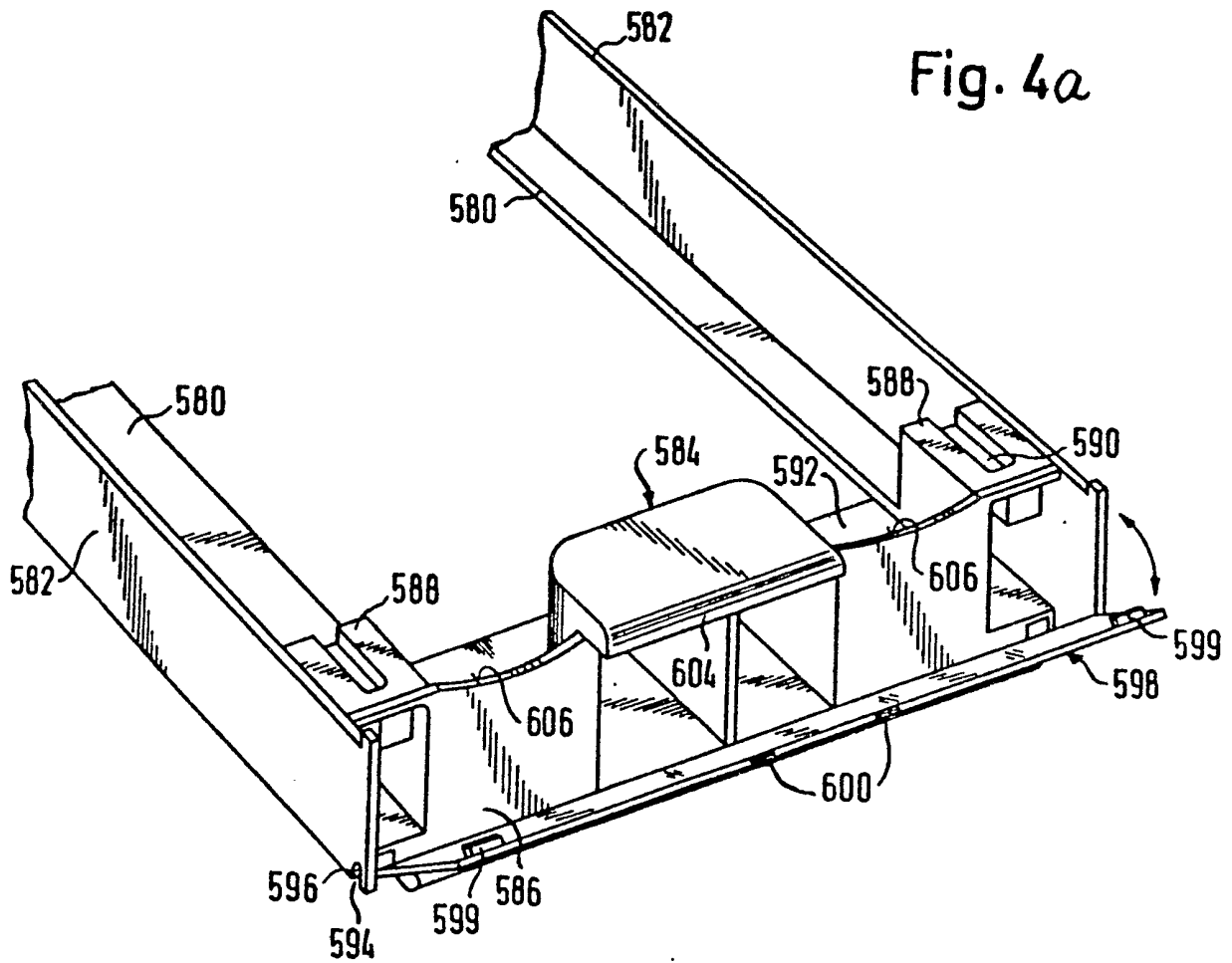


Fig. 4a

Fig. 5

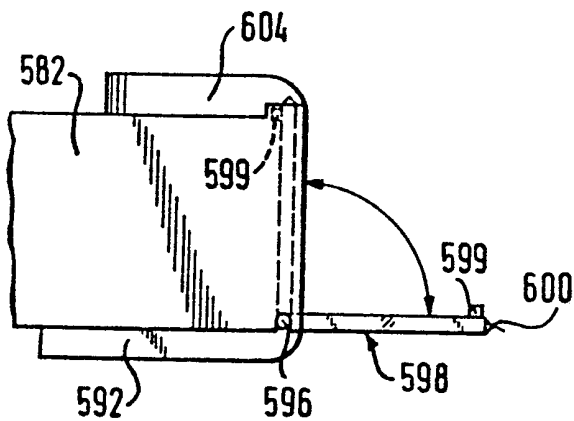


Fig. 6

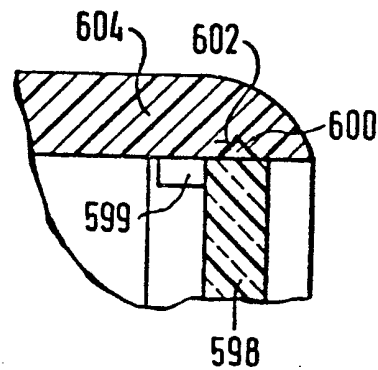


Fig. 4 b

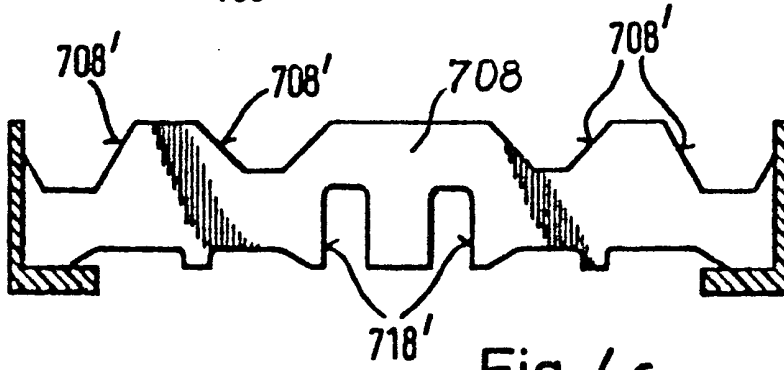
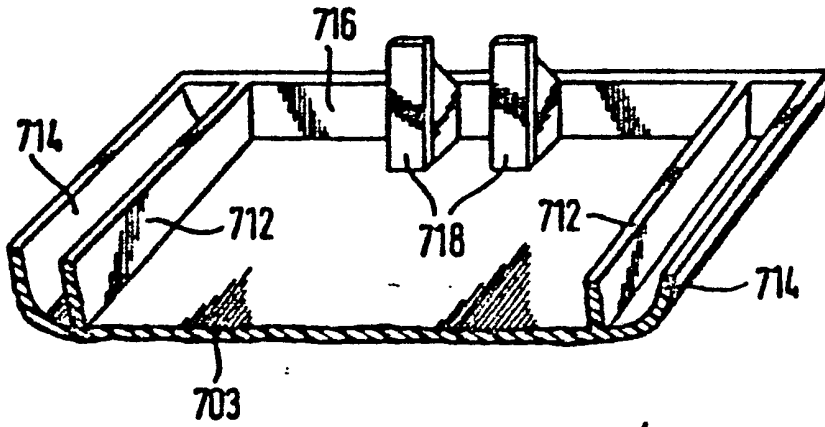


Fig. 4 c

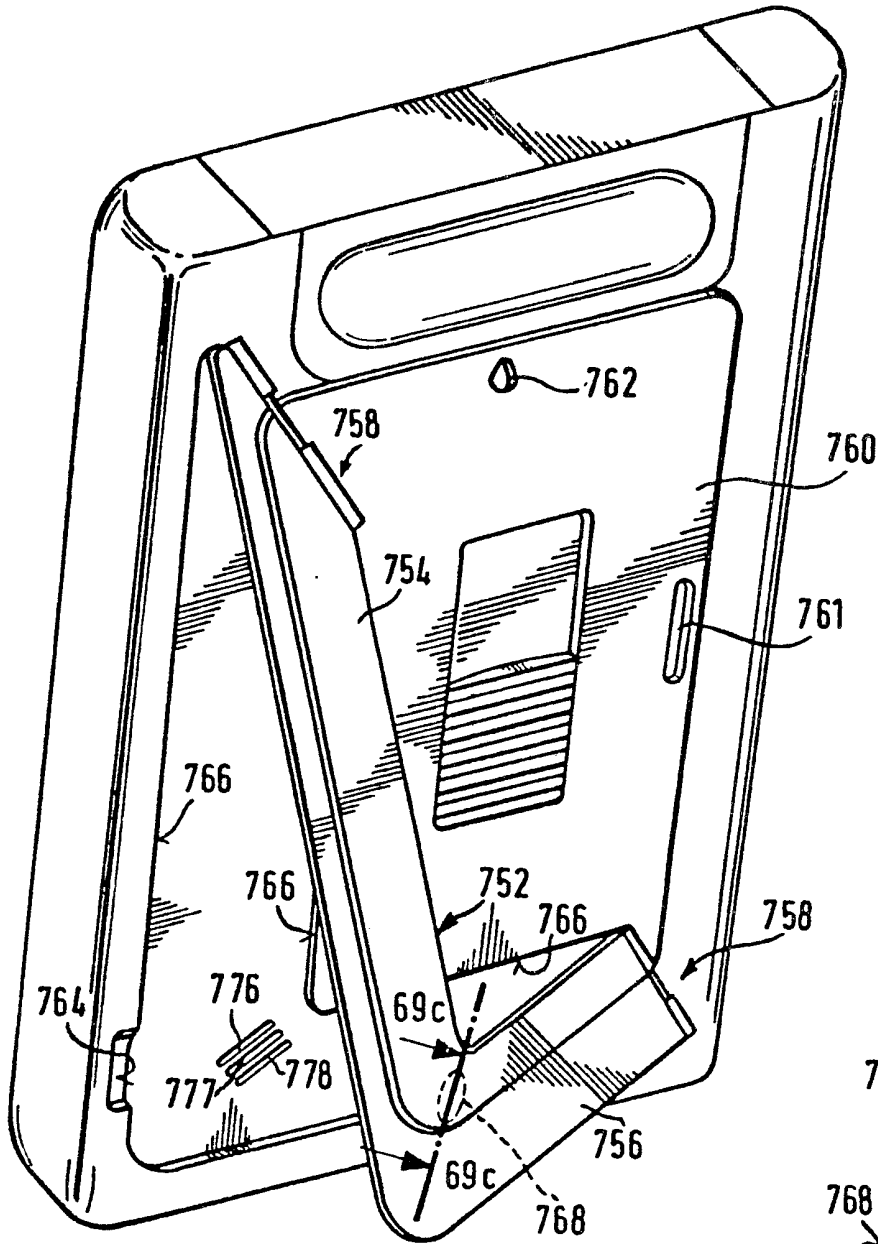


Fig. 7 a

Fig. 7 b

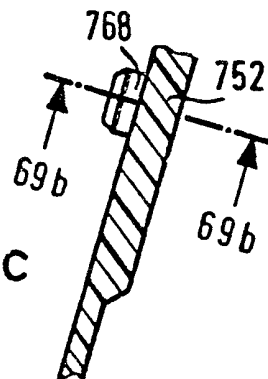
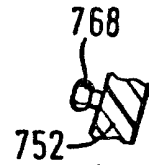
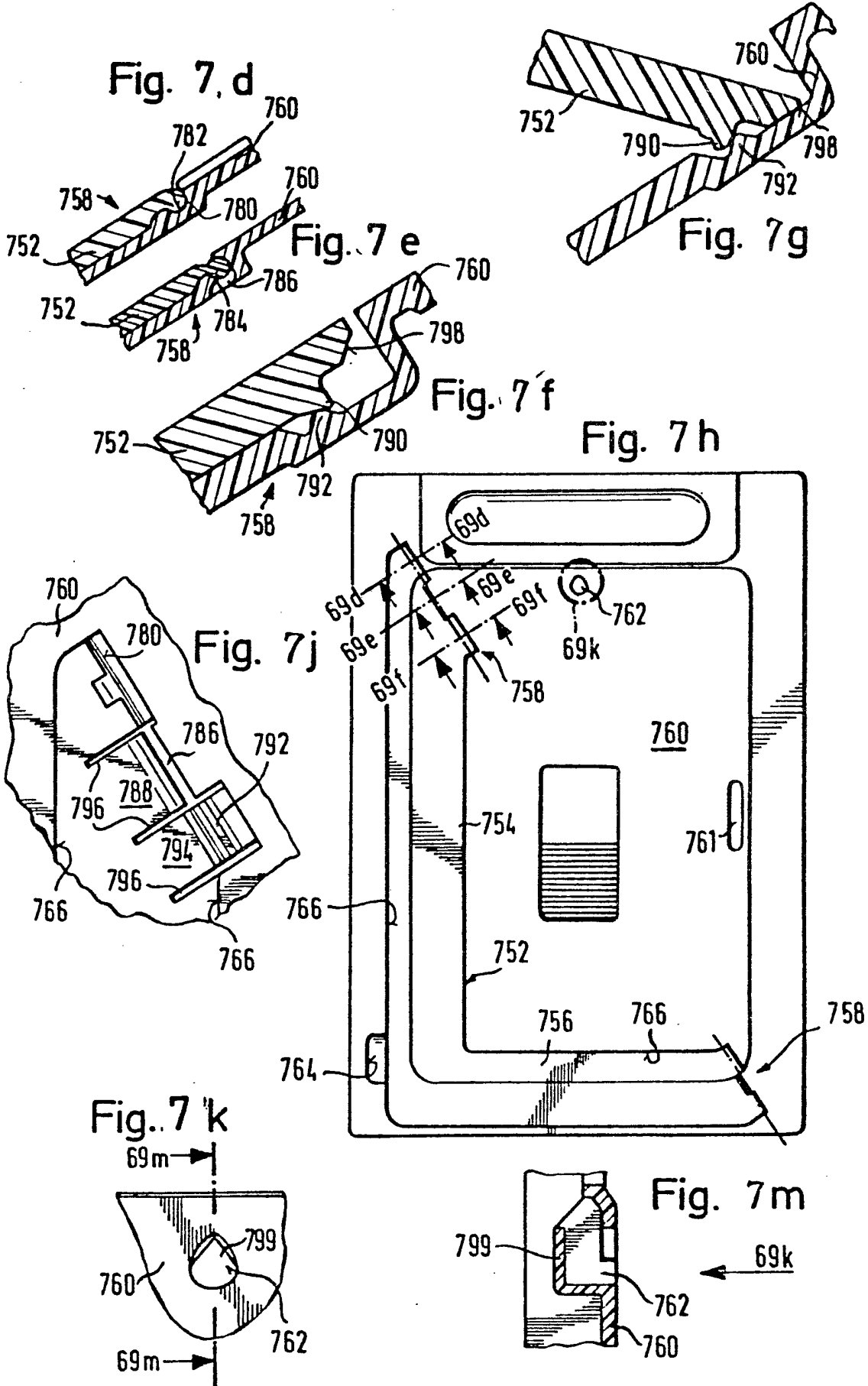


Fig. 7 c





## SPECIFICATION

## Container for Pictures Having Similar Formats

The invention relates to a container for pictures having similar formats. A container for pictures, that is to say for photopositives, is described and illustrated by the features mentioned in the precharacterising clause of patent claim 1 in DE—OS 27 42 347.

The containers illustrated and described in the abovementioned specification have external dimensions that are slightly larger than the picture format itself; that is to say, when the uppermost picture of the pile lies under the viewing plate, its edges that rest against the internal face of the container walls lie parallel to the edges of the viewing window and the picture lies "correctly" for the viewer. If the viewing window extends over the whole surface of the container, nothing is cut off even at the edges of the picture.

No objection may be made to the known container from the operational standpoint, but fault can be found with the aesthetic aspect. If, for example, the container is to be used not only for housing photographs, but, alternatively, also as a picture frame, either as a hanging frame or as a stand-up frame, the container differs unfavourably from the conventional design of such frames. In order to be capable of housing a suitable number of photographs, for example twenty four, the container is necessarily too thick in relation to its outline, and it lacks the very feature that constitutes a picture frame, that is to say, the framing areas of approximately equal width around the viewing window.

In a container of the type mentioned at the beginning that is currently on the market, attempts have been made to alleviate the last-mentioned disadvantages by constructing the viewing window to be smaller than the photograph format. This has the considerably disadvantage, however, that all the picture information which, as is known, in photo-positives frequently over the whole surface of the paper, is no longer presented through the viewing window.

The problem underlying the invention is to construct a container having a substantially rectangular outline for the accommodation of a pile of pictures of similar formats, comprising two parts which can be moved relative to one another and which, when in an open position, permit the pile to be removed and of which one part has a transparent viewing window, which, in a closed position of the container, has a format similar to that of the pictures and at which the uppermost picture, facing the viewing window, of the pile is presented, in such a manner that it is aesthetically satisfactory in the above sense, while the entire content of the picture presented at the viewing plate is visible, and without the need to expend considerable cost for its manufacture, which would render it unattractive as a housing container.

The solution to this problem provided

65 according to the invention is characterised in that the edges of the viewing window are at substantially equal distances from the outer edges of the container that run parallel to them, so that the viewing window is framed by portions of the surface of one part of the container, and that centering elements are provided inside the container by means of which, when the container is closed, at least the uppermost picture is aligned with respect to the viewing window.

70 Accordingly, the external dimension of the container are increased in the plane of the picture by the widths of the framing areas, with the result that the surface to thickness ratio is aesthetically improved and the function as a picture frame can better be fulfilled. This measure alone is not sufficient, however; the pile or, at least, the uppermost picture must be in alignment with the viewing window and must be held permanently in this position. The edge stops serve for this purpose.

85 It can be seen that a container of this type can be manufactured with a relatively small amount of material and effort, especially when it is so constructed that it comprises two injection-moulded parts of plastics material that can be moved relative to one another.

90 Preferably, one part of the container is constructed in the form of a housing having the viewing window, into which the other part of the container, in the form of a slider member, is pushed parallel to the viewing window. Housing and slider member then have, as mentioned above, larger dimensions than would actually be necessary for the particular picture format; the pictures are nevertheless positioned very accurately underneath the viewing window by means of the centering elements, preferably stops. The enlargement of the housing contour makes it possible to use the boundary between the viewing window and the portions of the surface of the housing that surround it as a positively locking element which allows several similar containers to be stacked one above the other, without the front face of the container being disfigured by details that have a "technical appearance", which is important for its function as a picture frame. A very attractive solution consists in setting back the window face towards the inside and constructing a corresponding bulging portion on the underside of the housing so that the individual, similar containers can be arranged one above the other like a pile of plates. This, on the other hand, makes it possible to provide the end faces of the slider members lying one above the other in the pile with labels which again would be of importance for the housing and archiving functions.

115 By way of example only, certain illustrative embodiments of the invention will now be described with reference to the accompanying drawings.

120 In all the embodiments the parts of the container are constructed, on the one side, in the form of a housing having a viewing window and,

on the other side, in the form of a slider member.

In the accompanying drawings:

Fig. 1 shows, ordered according to Fig. 1a—  
1d, four cross-sections through in each case one  
5 container according to the invention, the section  
being taken perpendicularly to the direction of  
withdrawal of the slider member,

Fig. 2a shows, as an example, a perspective  
10 view of the container according to Fig. 1d, seen  
obliquely from above.

Fig. 2b shows the forward portion of the  
associated slider member,

Fig. 3 shows a schematic view, in elevation, of  
the end faces of a pile of containers according to  
15 Fig. 1a,

Fig. 4a shows a partial perspective view of the  
grip end of the slider member in the embodiment  
according to Fig. 1a,

Fig. 4b shows a perspective view of that end of  
20 the lower shell of the housing remote from the  
housing opening,

Fig. 4c shows, in elevation, the associated rear  
face strip of the slider member,

Fig. 5 shows a partial side view of the slider  
25 member according to Fig. 4,

Fig. 6 shows, on a larger scale than Fig. 5, a  
partial sectional view of a detail of the label  
mounting, and

Figs 7a to 7m illustrate the construction of the  
30 container according to Figs 1a and 3—6 on its  
rear face, especially the construction and  
arrangement of a stand-up foot.

As can be seen in Figs 1a—1d, for reasons of  
production engineering the housing preferably  
35 comprises an upper shell and a lower shell, a  
spring pressure arrangement being mounted in  
the lower shell. This is not shown in the Figures in  
the drawings because it does not require a special  
construction within the scope of the present  
40 invention and can be taken from the state of the  
art.

In the embodiment according to Fig. 1a the  
container comprises a viewing window  
component 702, which is inserted into the upper  
45 shell 724 and is welded or glued to this (the  
components consist of plastics material that can  
be injection-molded, preferably polystyrene).  
Positioning lugs 704, between which the viewing  
window component 702 fits, are shaped onto the  
50 upper shell 724, and a framing or peripheral  
portion 722 engages over the flat upper face of  
the viewing window component 702. This face is  
accordingly set back with respect to the surface of  
this peripheral portion 722 which also serves to  
55 conceal the stops 684, 708 serving for the  
alignment of the pictures (these stops are shaped  
onto the upper shell and can be seen in plan view  
in Fig. 1a); it is also possible to see, however, that  
there is only a small peripheral region of the  
60 picture that cannot be seen through the viewing  
window.

The viewing window 702 has edge portions  
616 which project in the direction towards the  
lower shell but which could also be shaped onto  
65 the upper shell; in the latter case the viewing

window component would basically be a flat plate  
of transparent plastics material.

The lower shell 703 has an edge contour that  
is constructed to be approximately a mirror-image  
70 of the rounded-off edge region of the upper shell.  
Similarly as has been given above as a possible  
alternative for the upper shell, the lower shell is a  
double-walled construction in this edge region,  
the free edges of the external wall fitting, in a  
75 positively locking manner, into a correspondingly  
complementarily constructed cross-sectional  
shape 730 on the edge of the upper shell at point  
728. Like the upper shell, the lower shell has lugs  
similar to the positioning lugs 704, which help to  
80 stiffen the whole housing and which also correctly  
distance the components before they are glued or,  
preferably, ultrasonically welded together. Since  
this connection can be made also at the place of  
abutment 720 between the periphery 616 of the  
85 viewing window component and the internal wall  
of the lower shell, the three components 702,  
724, 703 are then durably connected to one  
another. The slider member 748 is inserted  
previously because this has stops (not shown in  
90 Fig. 1) to prevent it being removed completely.

Somewhat different from this is the  
embodiment according to Fig. 1b. Here, the upper  
shell 732 is merely a plate which is first of all  
welded to the cover frame 734. The stops for the  
95 withdrawal of the slider member are each  
arranged on the side struts 736 of the slider  
member and co-operate with counterstops on the  
lower shell 738 of the housing which are not  
visible in the sectional view. The lateral  
100 supporting limbs of the frame construction are not  
shown in this Figure and in Figures 1c and 1d;  
they correspond approximately to the  
embodiment according to Fig. 1a.

In Fig. 1c narrow lateral rails 744 and 746  
105 project towards one another from the lower shell  
740 and the upper shell 742 respectively,  
between which rails the stops shaped on the  
slider member 748 run. The counterstops are  
then provided both on the upper shell and on the  
110 lower shell.

Fig. 2a shows, as an example, a perspective  
view of a container as it is shown similarly in Fig.  
1d. It is possible to see clearly the raised edge  
104, by the thickness of which the viewing  
115 window is set back with respect to the framing  
portion of the upper shell, and an almost  
completely encircling groove 108 between the  
lower shell 106 and the upper shell 102 which  
here, for aesthetic reasons, is provided also on the  
120 end face of the slider member 114. This  
embodiment has no label window, as will be  
explained later. It is, however, possible to see the  
slide grip 112, which fits very exactly into the  
outline of the upper shell, so that only a very small  
125 gap is produced which is barely perceptible and  
aesthetically unobtrusive.

In Fig. 2b it is possible to see the end-face end  
of the slider member 114 having side ledges 124,  
a base reinforcement member 134 and an  
130 inwardly projecting grip part 140, which here, as

3  
 a stop, abuts the edges of an inserted pile of  
 pictures, that is to say, photographic prints (not  
 shown). The ledges 124 themselves can form the  
 lateral edge stops or alternatively these can be  
 5 formed by an inserted foamed plastics platelet  
 118. A resilient lug 120 having a claw 122  
 prevents the photographic prints immediately  
 being ejected when the slider member is pulled  
 10 out as may happen if the prints have curved under  
 the pressure of a pressure spring. The third stop  
 for the edge of the photographic print opposite  
 the grip part can likewise be arranged on the  
 slider member but it is preferably shaped on the  
 housing, as will be explained later. On comparing  
 15 Fig. 2a with Fig. 2b it can be seen that the edges  
 of the inserted photographic prints will lie almost  
 flush with the boundary edge of the viewing  
 window in the housing, in any case with regard to  
 the stops described so far, and the same applies  
 20 also to the fourth stop. The very narrow  
 overlapping portion that remains corresponds to  
 the tolerance when cutting the photographic  
 prints: the size of the viewing window is tailored  
 to the minimum tolerance limit and the distances  
 25 of the edge stops are adapted to the maximum  
 tolerance limit.

Fig. 3 shows a schematic front view of several  
 containers, for example according to Fig. 1b,  
 arranged one above the other and it can be seen  
 30 that the projecting base portion or the bulging  
 portion 852 fits exactly into the internal contour  
 854 of the portion of the surface surrounding the  
 viewing window in the container lying directly  
 below. Although it can be seen from Fig. 1a—1d  
 35 that the bulging portion of the housing base has  
 the same wall thickness as the rest of the lower  
 shell, which can be preferred for reasons of  
 production engineering, this gradation can also be  
 produced by increasing the thickness of the wall,  
 40 which is advantageous when, for example, a  
 stand-up foot (not yet described) is provided.

It can also be seen in Fig. 3 that a wedge shape  
 is provided for the cross-sections of the  
 interlocking contours of the containers. The upper  
 45 container therefore does not rest by its outer  
 region on the viewing window of the lower  
 container (risk of scratching;) but by these region  
 of the step on its base, so that variations caused  
 by manufacturing tolerances can be taken up.

50 In Fig. 3 it is also possible to see the position  
 and the dimensions of a label window that is  
 provided on the slider member of the container  
 and will now be described with reference to Figs.  
 4—6.

55 Figs 4 to 6 show in detail the construction of  
 the slider member close to its grip end; a slider of  
 this type or of similar type can be provided in a  
 container according to Fig. 1.

60 Slider member ledges 580 with injection-  
 moulded lateral guides 582 and the grip 584 in  
 the centre of the front wall 586 can be seen. The  
 transverse edges of the pictures resting on the  
 ledges 580 can be supported against grip 584  
 and lateral stops 588. Grip 584 and stops 588  
 65 are hollow. The stops 588 have on their upper

side a depression 590 in which holding down  
 cams on the housing are located. On the  
 underside of the slider member the ledges are  
 connected to one another by a base cross-  
 70 member 592. The base crossmember fits into a  
 complementary cutout portion in the housing  
 which does not extend over the entire width of  
 the housing. For this reason, between the lateral  
 guides 582 and the base crossmember 592 there  
 75 remains a corresponding space and the lateral  
 guides are in this region accessible at their lower  
 edges. Close to their ends, these lower edges  
 each have an elongate incision 594, into which a  
 hinge-pin 596 of a label cover 598 is rotatable.  
 80 When assembling the label cover, this is  
 resiliently deformed and snapped into the  
 incisions 594. Between the front wall 586 and  
 the label cover, which is made of transparent  
 plastics material, a label (not shown) can be  
 85 inserted; thereafter, the cover 598 is hinged up  
 out of the insertion position shown in Fig. 4 and is  
 locked with shaped-on teeth 600 in a slot 602 on  
 the underside of the top wall 604 of the grip. The  
 outer face of the cover 598 then closes flush, as  
 90 can be seen in the vertical section Fig. 5. Fig. 6  
 shows, on an enlarged scale, the locking  
 mechanism of the label cover. The cover can be  
 released when the slider member has been  
 pulled out by pressing with the fingers in the  
 95 region of two inwardly-projecting curvatures 606  
 in the front wall.

Fig. 4 shows a perspective, partly broken away  
 view of the associated lower shell of the housing  
 in a double-walled construction. The inner struts  
 100 712 are congruent with the side walls of the  
 upper shell and along the contact faces the two  
 shells are welded together ultrasonically.

From the housing wall 716 two picture edge  
 stops 718 project inwards. They have to clear the  
 105 path of the slider member and especially the path  
 for the carrier comb 708 forming the rear wall of  
 the slider member, shown in front view in Fig. 4c.  
 For this reason the comb 708 has cut-out  
 portions 718', 708', the latter clearing the way  
 110 also for stops located on the upper shell.

It is advisable, of course, when using a  
 container as a stand-up frame to arrange the  
 particular edge provided with the label at the  
 bottom; this results also in the preferred  
 115 attachment of the stand-up foot according to Figs  
 7a—m.

Figs 7a to 7m show the arrangement and  
 construction of a stand-up foot in a container for  
 example according to Fig. 2a. In Fig. 7a the  
 120 container can be seen from the rear with the  
 stand-up foot 752 opened out. The stand-up foot  
 has a longitudinal limb 754 and a transverse limb  
 756 and is connected by means of hinges 758 to  
 the lower shell 760 of the housing in such a  
 125 manner that, when opened out, it permits the  
 device to be set up like a table-top stand both in  
 upright format and sideways format, but when  
 folded in, lies flush with the external face of the  
 lower shell, so that the container may optionally

also be used as a hanging frame. For that purpose, eyelets 761, 762 are provided.

On the lower shell 760 of the housing there is provided a depression 766 accommodating the foot 752; furthermore, there can be seen a finger incision 764 for the movement of the foot and three slot-shaped openings 776, 777 and 778. In the slot 777 there locks an elongated stud shaped on the foot 752, the strips defining the slot 777 then being able to move resiliently into the slots 776 and 778 respectively. The stud 768 is illustrated in Fig. 7b and c.

Fig. 7d—j shows in detail the construction of the hinges 758. Description of only the one hinge will be sufficient, the other being mirror symmetrically constructed. In Fig. 7h, which shows a plan view onto the rear side (lower shell) of the container, in each case those sections are marked which are illustrated on a greatly enlarged scale in Fig. 7d—f, namely with the foot 752 folded in. Fig. 7g is a section corresponding to Fig. 7f but with the foot opened out. Viewed in the axial direction of the hinge, three portions can be distinguished: the stop portion as shown in Fig. 7d, in which a rolloff edge 780 on the foot engages in a complementary roll-off groove 782 of the lower shell; a holding portion as shown in Fig. 7e, in which a hinged portion 784 of the foot is snapped into a hinge aperture 786 in the base of the lower shell, (a lug 788 of this base is laterally limited by slots so that it is able to yield resiliently outwards cf. Fig. 7j); and a locking portion as shown in Fig. 7f, g, wherein a projection 790 shaped on the foot 752 snaps resiliently over a rib 792 when the foot is opened out or folded in. In that operation, a second lug 794, likewise limited by slots 796, yields inwards. The opening out angle of the foot is defined by its stop edge 798 (Fig. 7g).

Fig. 7k shows, again on an enlarged scale, the eyelet 762 past which the slider member has to slide. For that reason a wall hook, on which the frame hangs, must not project too far into the housing so that the eyelet opening in the interior of the housing is closed off by a transverse wall 799 (Fig. 7m).

#### Claims

1. A container having a substantially rectangular outline for the accommodation of a pile of pictures of similar formats, comprising two parts which can be moved relative to one another and which, when in an open position, permit the pile to be removed and of which one part has a transparent viewing window, which, in a closed position of the container, has a format similar to that of the pictures and at which the uppermost picture, facing the viewing window, of the pile is presented, characterised in that the edges of the viewing window are at substantially equal distances from the outer edges of the container that run parallel to them, so that the viewing window is framed by portions of the surface of one part of the container, and that centering elements are provided inside the container by

65 means of which, when the container is closed at least the uppermost picture is aligned with respect to the viewing window.

2. A container according to claim 1, characterised in that the two parts of the

70 container can be moved relative to one another.

3. A container according to claim 1, characterised in that the centering elements are stops assigned to the edges of at least the picture presented at the viewing window.

75 4. A container according to claim 3, characterised in that some of the stops are constructed on one part of the container and the remaining stops are constructed on the other part of the container.

80 5. A container according to one of claims 2 to 4, characterised in that one part of the container is constructed in the form of a housing having the viewing window and the other part of the container is constructed in the form of a slider member that can be inserted into the housing parallel to the viewing window.

85 6. A container according to claims 4 and 5, characterised in that one of the stops resting against the edges of the pictures is part of a grip part by means of which the slider member can be withdrawn from the housing.

90 7. A container according to claim 5, characterised in that a pile pressure spring arrangement is provided opposite the viewing window in the housing.

95 8. A container according to claim 5, characterised in that the viewing window is set back towards the inside with respect to the portions of the surface of the housing that surround the window in the manner of a frame, and that the underside of the housing remote from the viewing window has a bulging portion that is substantially congruent with the viewing window.

100 9. A container according to claim 8, characterised in that the bulging portion is constructed to fit, in a positively locking manner, onto the viewing window of a similar container.

110 10. A container according to claim 5, characterised in that the slider member has an end face that, in the inserted position of the slider member, lies substantially flush with the contour of the housing.

115 11. A container according to claims 6 and 10, characterised in that the grip part of the slider member is adapted to the contour of the housing.

12. A container according to claim 10, characterised in that the slider member has a label window in the region of its end face.

120 13. A container according to claim 12, characterised in that the label window includes a transparent cover that can be hinged upwards.

125 14. A container according to claim 8, characterised in that a part of the bulging portion is formed by a stand-up foot which can be hinged out from the underside of the housing.

15. A container according to claim 6, characterised in that those edges of the

photographic prints remote from the grip part are assigned stops on the housing.

16. A container according to claim 15, characterised in that the edge stops on the housing are constructed in the manner of a comb having teeth perpendicular to the edges of the picture, and that the slider member has carrier elements which engage in the gaps between the teeth.
17. A container according to claim 16, characterised in that the carrier elements of the slider member form the transverse wall, opposite the grip part, of the slider member and that the transverse wall is connected to the grip part by lateral guide strips.
18. A container according to claims 17, characterised in that the housing is of double-walled construction in the region of the slider member guide strips.
19. A container substantially as herein described with reference to and as illustrated by the accompanying drawings.
20. A container as claimed in claim 19 substantially as herein described with reference to and as illustrated by Figures 1a and 4a of the accompanying drawings.
21. A container as claimed in claim 19 substantially as herein described with reference to and as illustrated by Figure 1b of the accompanying drawings.
22. A container as claimed in claim 19 substantially as herein described with reference to and as illustrated by Figure 1c of the accompanying drawings.
23. A container as claimed in claim 19 substantially as herein described with reference to and as illustrated by Figures 1d, 2a and 2c of the accompanying drawings.
24. A container as claimed in any of claims 19 to 22 substantially as herein described with reference to and as illustrated by Figures 4 to 6 of the accompanying drawings.
25. A container as claimed in any of claims 19 to 24 substantially as herein described with reference to and as illustrated by Figures 7a to 7m of the accompanying drawings.