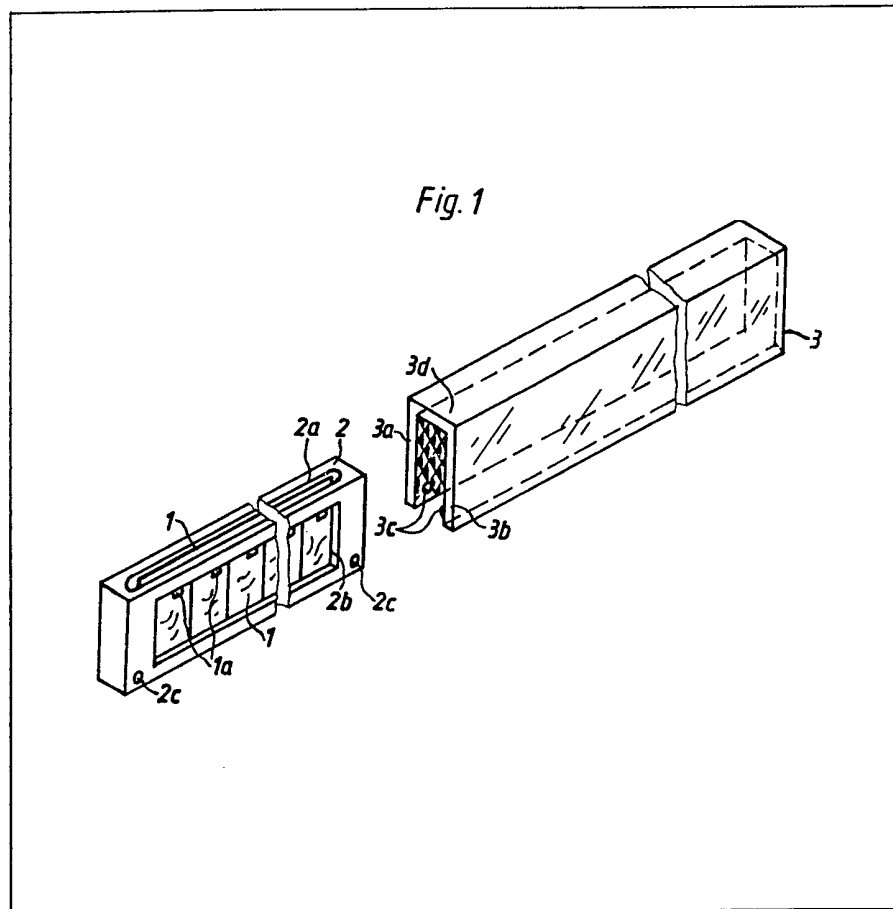


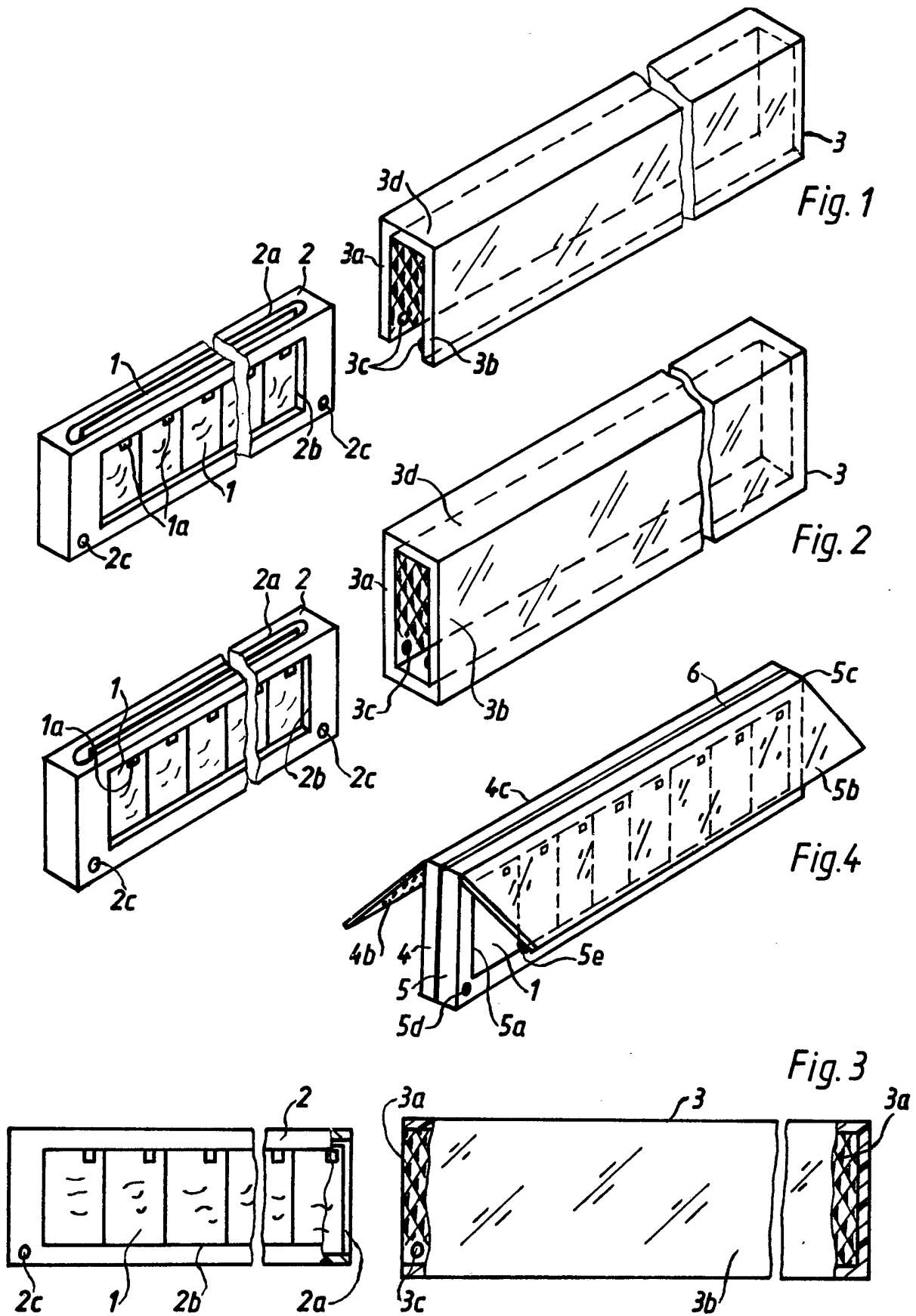
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(54) **Holders for photographic film strips**

(57) A frame 2 has windows 2b in opposed flat sides thereof through which a film strip 1 can be viewed. A cover 3 can be attached to the frame 2 so that a transparent portion 3b thereof covers the side of the film strip 1 from which it is to be viewed and an opaque or light-diffusing portion 3a thereof covers the opposite side of the film strip, allowing the film strip to be

viewed by holding the assembly up to the light. Embodiments are disclosed in which the cover 3 is of U-shaped cross-section and is a push-fit over the frame 2 (Fig. 1), and a sleeve of rectangular cross-section (Fig. 2) or a cover strip (Fig. 3) which can be slid end-wise over the frame. Alternatively, the cover 3 can take the form of a pair of flaps (4b and 5b, Fig. 4) which are integrally onmoulded with the flat frame sides by means of respective plastic hinges.





SPECIFICATION

Holders for photographic film strips

This invention relates to holders for photographic film strips containing a plurality of pictures, and more particularly to such holders of the type comprising a frame having opposed flat sides between which the film strip is received in use, the flat frame sides having windows therein which enable the pictures to be viewed and which possibly also give access to marginal perforations of the film.

Holders of this type are disclosed in German Utility Models Nos. 1 812 022, 1 730 346 and 1 510 448, for example. These known holders are suitable at most for viewing the individual pictures of a film strip engaged therein, but cannot be used as packages for despatch of film strips by developing or reversal institutions.

It is an object of the present invention to provide a holder of the above-mentioned type which can be used as a ready-to-despatch package.

According to the present invention, there is provided a holder for a film strip containing a plurality of pictures, comprising a frame having opposed flat sides between which said film strip is received in use through a receiving slot, the flat frame sides having windows therein which enable the pictures to be viewed, and a cover connected or adapted for connection to the frame for selective closing of said windows and/or said receiving slot.

Such a holder enables a framed film strip to be viewed readily, and moreover permits the film strip to be made readily available for projection or copy-printing without interfering glass shields or the like.

The present invention will now be further described, by way of example only, with reference to the accompanying drawings, in which:—

Figure 1 is an exploded perspective view of a first embodiment of a holder according to the present invention;

Figure 2 is an exploded perspective view of a second embodiment of a holder according to the present invention;

Figure 3 is an exploded side view, partly in section, of a third embodiment of a holder according to the present invention; and

Figure 4 is a perspective view of a fourth embodiment of a holder according to the present invention.

Referring first to Figure 1, the holder illustrated therein comprises a thin, oblong frame 2 made in one piece from plastics material. The frame 2 has two opposed flat sides between which a film strip 1 containing a plurality of pictures is received through a slot 2a in one narrow longitudinal side of the frame, the slot 2a being at least as long as the film strip 1.

Approximately congruent windows 2b are cut out from both flat sides of the frame 2, and are at least large enough to reveal all of the pictures on the film strip 1. If the frame 2 is intended to be

used only for viewing or projection of the pictures contained in the film strip 1, it is advisable to make the windows 2b just sufficiently large to expose all of the pictures. However, if the frame is also intended to be used in a copy-printing machine, marginal perforations 1a of the film strip should be made accessible to allow stepwise advancement of the film strip jointly with the frame 2 by suitable transport means provided in or on the copy-printing machine. In this event, the windows 2b may (as shown in Figure 1) be sufficiently large to expose the perforations 1a in addition to the pictures, or further elongated slot-like openings may be provided parallel with the windows 2b to reveal just the marginal film perforations 1a.

Apart from this, the one-piece viewing frame 2 may be designed like any conventional one-piece transparency holder, as far as the introduction and positioning of the film strip 1 is concerned, and basically differs from such a transparency holder only in respect of its outside measurements. Accordingly, the slot 2a may be permanently present and/or expandable for introduction of the film strip. Instead of a one-piece viewing frame 2 it is also possible to provide a two-piece viewing frame corresponding to any of the various known types of two-piece plastics transparency holders.

In order to make the viewing frame 2 suitable for use as a packaging box or container, the film strip 1 is protected in the region of the windows 2b by a cover 3. In the embodiment of Figure 1, the cover 3 is a U-shaped elastic bracket made of plastics material and adapted to be slipped over the flat sides and one of the narrow longitudinal sides of the viewing frame 2, so that it extends flush with the two short narrow sides and the second narrow longitudinal side of the frame 2 when pushed fully over the latter. The two side faces 3a and 3b of the U-shaped cover 3 may have a certain amount of pre-applied tension towards each other for a snug fit on the viewing frame 2. Alternatively, co-acting recesses or depressions 2c and studs 3c may be integrally moulded on the flat frame sides and on the inside of the cover for detachable snap-fit connection of the frame and the cover.

In order to allow the pictures of the film strip 1 held in the viewing frame 2 to be viewed even when the cover 3 is fitted on the frame 2, one flat side 3b of the cover 3 forms a transparent plate whilst the other flat side 3a forms an opaque or light-diffusing plate. The cover 3 must be slid over the viewing frame 2 in such a way that the transparent side 3b covers the side of film strip from which the pictures appear correct left-to-right, i.e. non-reversed. If the viewing frame 2 complete with the cover 3 properly fitted thereon is held up with the opaque side 3a against a light source, the pictures in film strip 1 can be viewed directly through the transparent side 3b.

In addition to being used as a ready-to-despatch package or box, the viewing frame 2 with or without the cover 3 can be inserted into viewing apparatus for framed photographic

transparencies, wherein the film strip 1 can be viewed picture by picture. Projection of the individual pictures in a projector for framed transparencies, particularly of the kind where manual slide transport is provided, is equally feasible.

If labelling facilities are required on either the frame 2 or the cover 3, a suitable surface region may be roughened for this purpose. The narrow longitudinal side 3d of the cover part 3 is preferred for this purpose, but lateral edges of the flat frame sides are equally suitable.

The embodiment shown in Figure 2 differs from that illustrated in Figure 1 only in that the cover 3 is designed, not as a U-shaped bracket, but as a sleeve of rectangular cross-section whose two ends are flush with the short narrow sides of the viewing frame 2 when the sleeve is fitted over the latter. In the embodiment shown in Figure 3, on the other hand, the cover 3 takes the form of a push-over cover strip which is open only along one short narrow side thereof. In this embodiment, the permanently open introductory slot 2a for the film strip can be provided in one of the short narrow sides of the viewing frame 2, since it can be closed by the closed end of the cover strip.

In the embodiment shown in Figure 4, the frame of the holder is constructed in two parts 4 and 5 between which the film strip 1 is received. Each of the parts 4 and 5 has a viewing window therein, although only the viewing window 5a in the part 5 is actually visible in this Figure. The frame can be of similar construction to any conventional two-piece transparency holder, preferably of the machine-framed type. Each of the parts 4, 5 is provided with an integrally onmoulded cover flap 4b, 5b preferably attached thereto by means of a plastic hinge 4c, 5c. The cover flap 4b is made opaque or light-diffusing, whilst the cover flap 5b is made transparent. The cover flaps 4b and 5b can be retained in positions in which they cover or obturate the windows in the parts 4 and 5 by the snap-engagement of co-acting studs and recesses, for example as shown at 5d and 5e.

In an alternative arrangement (not shown), the cover flaps 4b and 5b are L-shaped and overlap one another along the lower narrow longitudinal side of the frame 4, 5 and are adapted to be fastened together by press-studs to close the holder. In a further alternative construction, the parts 4 and 5 of the frame are integrally interconnected by means of a plastic hinge connection, as indicated at 6 in Figure 4.

CLAIMS

1. A holder for a film strip containing a plurality of pictures, comprising a frame having opposed flat sides between which said film strip is received in use through a receiving slot, the flat frame sides having windows therein which enable the pictures to be viewed, and a cover connected or adapted

for connection to the frame for selective closing of said windows and/or said receiving slot.

2. A holder as claimed in Claim 1, wherein the cover is transparent in a region thereof which covers a side of the film strip from which said pictures are to be viewed.

3. A holder as claimed in Claim 1 or 2, wherein the cover is opaque or light-diffusing in a region thereof which covers the opposite side of the film strip to that from which said pictures are to be viewed.

4. A holder as claimed in Claim 1, wherein the cover includes a transparent region which is adapted to cover the windows in one of the flat frame sides and an opaque or light-diffusing region which is adapted to cover the windows in the other flat frame side.

5. A holder as claimed in Claim 2, 3 or 4, wherein the cover includes outside said transparent, opaque or light-diffusing regions at least one labelling surface adapted for the application thereto of an inscription or label.

6. A holder as claimed in Claim 5, wherein said at least one labelling surface is provided on a narrow longitudinal side of the cover.

7. A holder as claimed in any preceding Claim, wherein the cover is U-shaped in transverse cross-section and is adapted to be push-fitted over the frame so that it extends over both flat sides and one narrow longitudinal side of the frame.

8. A holder as claimed in any one of Claims 1 to 6, wherein the cover is in the form of a sleeve adapted to be slid over the frame.

9. A holder as claimed in Claim 8, wherein the sleeve is rectangular in transverse cross-section and is of the same length as the frame.

10. A holder as claimed in any one of Claims 1 to 6, wherein the cover is in the form of a cover strip which matches the shape of the frame and which is adapted to be slid over the latter.

11. A holder as claimed in any one of Claims 1 to 6, wherein the cover comprises two flaps, each of which is hinged to an edge of a respective one of the flat frame sides so that it can be folded down to cover the windows in the latter.

12. A holder as claimed in Claim 11, wherein the flaps are made of plastics material.

13. A holder as claimed in any preceding Claim, wherein the frame is constructed in two parts between which the film strip is held.

14. A holder as claimed in any one of Claims 1 to 12, wherein the frame comprises two parts which are integrally joined together by a plastic hinge and between which the film strip is held.

15. A holder as claimed in any preceding Claim, wherein co-acting snap-fit elements are provided on the frame and on the cover for retaining the cover in a position in which it closes said windows and/or said receiving slot.

16. A holder as claimed in any preceding Claim, wherein the frame is made of plastics material.

17. A holder as claimed in any preceding Claim, wherein the windows in the flat frame sides are

sufficiently large to reveal marginal perforations of said film strip.

18. A holder for a film strip containing a

5 plurality of pictures, substantially as hereinbefore described with reference to any one of Figures 1 to 4 of the accompanying drawings.

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