

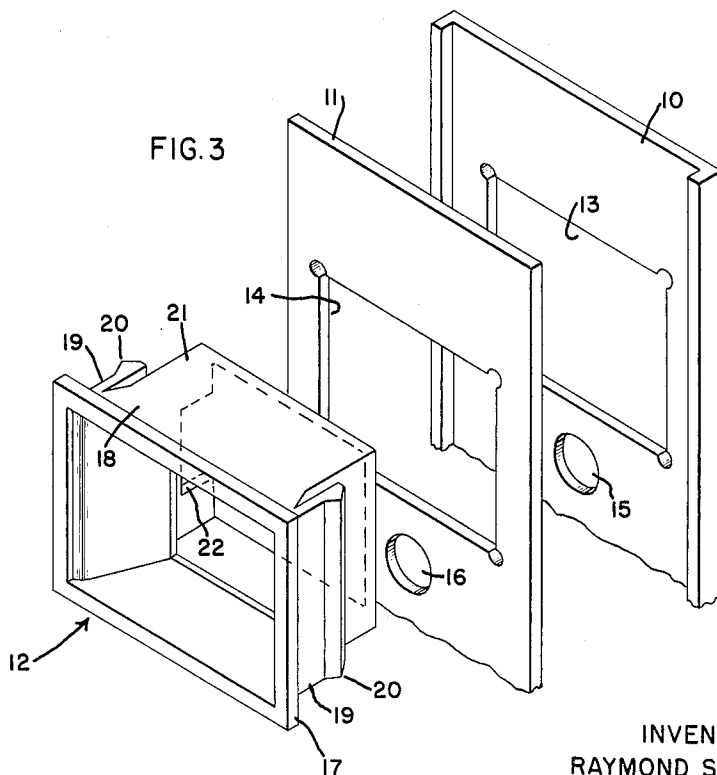
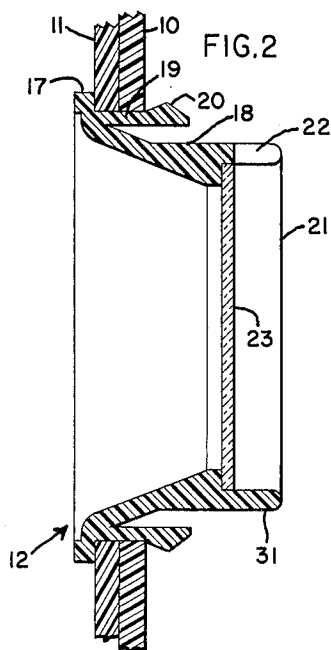
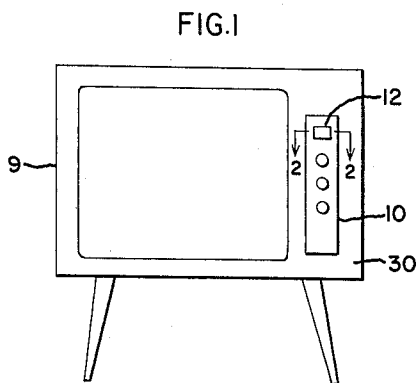
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CHANNEL INDICATOR WINDOW ASSEMBLY

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CHANNEL INDICATOR WINDOW ASSEMBLY
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The present invention relates to a viewing window assembly for channel indicators on television sets.

Control panels for television sets as presently known generally include an escutcheon which covers the television operating mechanisms, a background plate which provides a decorative color background, and a clear plastic overlay upon which are written the designations of the various controls. All of these elements are appropriately apertured for the extension therethrough of control shafts from control knobs on the front to the internal operating mechanisms. In the case of television sets having an illuminated channel indicator, the escutcheon is provided with an integrally formed hood surrounding a viewing aperture and extending into the set, with provision being made at the rear of the hood for mounting a screen on which the channel numeral is projected. According to previously known procedures, the escutcheon and hood are made by an injection molding process. Where relatively small quantities are involved, it is not practicable to use this process since the expense of tooling becomes prohibitive. Furthermore, previously known control panels require an additional mounting means for attaching the background plate and overlay, thereby creating additional expense and labor.

The present invention is therefore directed to a channel indicator window assembly for a television receiver which avoids the expense of previously known window assemblies, and which eliminates the need for extra means for attaching the background plate and overlay.

It is accordingly an object of the present invention to provide a channel indicator window assembly for a television receiver which is easily and inexpensively produced.

A further object of the present invention is the provision of an inexpensive, easily produced channel indicator viewing window which includes improved means for holding the background plate and overlay in place.

Further objects and advantages of the present invention will become apparent as the description and illustration thereof proceed.

Briefly in accordance with one form of the present invention, an escutcheon is provided having appropriate apertures therein for control shafts and for a channel indicator viewing window. An insert comprising a window frame and hood combination is mounted on the escutcheon by a pair of opposed resilient members. The resilient members have raised ridges thereon and are dimensioned to fit within the aperture in the escutcheon. When the insert is pressed into the channel indicator aperture in the escutcheon, the resilient members flex to allow the ridges to pass through and then snap back into position, thus providing a snap-in mount. The window frame provides means for holding the background plate and overlay in position against the escutcheon.

The novel features believed characteristic of the invention are set forth in the appended claims. The invention itself, together with further objects and advantages thereof may best be understood by reference to the following description taken in connection with the appended drawings in which:

FIGURE 1 is a front view of a television receiver illustrating the positioning of an escutcheon and channel indicator viewing window thereon;

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FIGURE 2 is a sectional view taken along lines 2—2 of FIGURE 1 illustrating a viewing window assembly, and

FIGURE 3 is an exploded view of a window assembly which embodies the present invention.

Referring now to FIGURES 1, 2 and 3, a channel indicator window assembly is mounted on a television receiver 9 and comprises escutcheon 10, overlay 11 and window insert 12. Escutcheon 10 and overlay 11 are apertured, as indicated at 13 and 14 respectively, to receive insert 12 and may contain further apertures 15 and 16 for the passage of television receiver adjustable control shafts therethrough. Escutcheon 10 comprises a support plate for the control mechanism of the set and may be mounted by a suitable means to a front surface 30 of the receiver 9. Overlay 11 comprises a clear plastic member having appropriate indications thereon of the function of the various control shafts, for example, "vertical," "contrast," etc. In addition, a background plate (not shown) may be provided between escutcheon 10 and overlay 11 to provide an appropriate color background to supplement the decorative appearance of the assembly. The background plate would contain apertures corresponding to those in escutcheon 10 and overlay 11.

The window insert 12 comprises a frame 17 and a hood 18. The frame 17 is sized to overlie the periphery of the apertures 13 and 14, and to contact the outer surface of overlay 11. Hood 18 comprises, in the embodiment shown, a four-sided extension attached to or integrally formed with frame 17 to provide a shaded inset viewing area. The interior of the hood may be curved as indicated to present an attractive appearance.

The window insert 12 also includes at least one pair of resilient planar members 19 which are attached to or integrally formed with the hood and frame and which connect thereto at a point closely adjacent the junction of the hood and frame. The members 19 are arranged to extend through apertures 13 and 14, and the overall size of insert 12 is such that the outer flat surfaces of members 19 fit tightly within the apertures. A projection or ridge 20 is formed adjacent the unattached end of each member and extends in an outward direction, away from the hood. The distance between the back of frame 17 and the forward edge of ridges 20 is equal to the combined width of any intervening members such as escutcheon 10 and overlay 11. The ridges 20 are dimensioned such that the distance between peaks of the ridges is greater than the corresponding dimension of apertures 13 and 14. Thus, the window insert 12 is held tightly in place in escutcheon 10 to provide an inset viewing area for the projected channel indication. The overlay is held tightly in position between frame 17 and escutcheon 10, thereby eliminating the need for additional mounting means for this member.

The escutcheon 10 described above is preferably formed by the extrusion process while window insert 12 is preferably integrally formed of molded plastic. However, it is noted that either of these members may be formed in any appropriate manner, the present invention being directed to the provision of the described elements and to their assembly.

Also illustrated at the rear of hood 18 is an extension 21 surrounding three sides and a portion of the fourth and having a gap 22 in the fourth side. Extension 21 and gap 22 provide a mounting means for the screen, for example, ground glass, upon which the channel indication is to be projected.

FIGURE 2 is a cross sectional view of the assembly which clearly illustrates the relationship of the assembled elements. As can be seen in this figure, escutcheon 10 and overlay 11 take up the entire distance between frame

17 and ridge 20 so that a tight fit is provided, thereby holding overlay 11 in place. It is noted that, if any intervening members such as a background plate are desired, the distance between frame 17 and ridges 20 would be increased just enough to hold these members tightly without additional mounting means. The interior curvature of hood 18 is shown in this figure, as is the gap 22 in extension 21.

The space left between hood 18 and resilient members 19 to allow the members 19 to flex when ridges 20 pass through the apertures can be seen in FIGURE 2 and the ground glass screen, 23, is also illustrated.

It will be clear from the foregoing description and illustration of the present invention that the channel indicator window assembly provided is composed of inexpensive parts which may be quickly and easily assembled, and further that the assembly enables the elimination of holding means for intermediate background plates and overlays.

It is noted that modifications may be made on the basic assembly described above. For example, the resilient members may comprise two sides of the hood rather than being disposed adjacent the hood. The specific embodiment described herein is presented merely as one example of the various forms the practice of this invention may take. Therefore it is intended in the appended claims to cover all modifications and variations which may come within the true spirit and scope of this invention.

What I claim as new and desire to secure by Letters Patent of the United States is:

1. In a television channel indicator assembly, a window insert adapted to be mounted in a first aperture in an escutcheon comprising:

- (a) an overlay arranged to be mounted parallel to the escutcheon and having a second aperture arranged for substantial registry with the first aperture in the escutcheon;
- (b) a frame sized to overlie the periphery of the first and second apertures;
- (c) a hood extending from said frame and defining an inset viewing area; and
- (d) a pair of planar resilient members attached to said hood adjacent said frame;
 - (aa) said members being mounted on opposing sides of said hood and being dimensioned to extend through the first and second apertures;
 - (bb) a projection being formed on each of said resilient members adjacent its unattached end, each projection extending outwardly away from said hood;
 - (cc) the distance from the back of said frame to the leading edge of each of said projections being equal to the combined width of the escutcheon and said overlay;
 - (dd) the distance between the outermost points of said projections being slightly greater than the corresponding dimension of the first and second apertures whereby said resilient members may

be flexed upon being pushed through the first and second apertures to provide a snap-in mounting.

2. In a television channel indicator assembly, a window insert as claimed in claim 1 wherein:

(a) said hood is formed integrally with said frame and said resilient members.

3. In a television receiver, a channel indicator window assembly comprising:

- (a) an escutcheon having a first aperture therein;
- (b) an overlay disposed adjacent said escutcheon and having a second aperture therein substantially in registry with the first aperture; and
- (c) an insert extending through and mounted in the first and second apertures, said insert comprising:
 - (aa) a frame sized to overlie the periphery of the first and second apertures;
 - (bb) a hood extending from said frame through the first and second apertures and defining an inset viewing area; and
 - (cc) a pair of resilient members attached to said hood adjacent said frame and extending rearwardly from said frame;
 - (dd) said members being mounted on opposing sides of said hood and being dimensioned to extend through the first and second apertures;
 - (ee) each of said resilient members having a projection formed thereon adjacent its unattached end, each projection extending outwardly in a direction away from said hood;
 - (ff) the distance from the back of said frame to the leading edge of each of said projections being equal to the combined width of the escutcheon and said overlay;
 - (gg) the distance between the outermost points of said projections being slightly greater than the corresponding dimension of the first and second apertures whereby said resilient members may be flexed upon being pushed through the first and second apertures to provide a snap-in mounting.

4. In a television control panel, a channel indicator window assembly as claimed in claim 3 wherein said hood is formed integrally with said frame and said resilient members.

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