Feb. 18, 1958 J. C. PACKARD 2,823,475

SPECTACULAR SIGN

Filed March 21, 1956

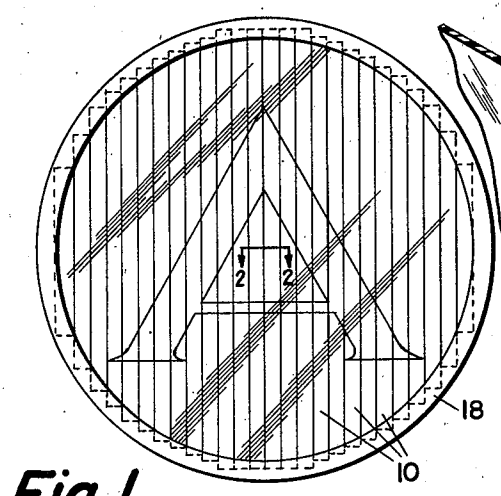



Fig. 1

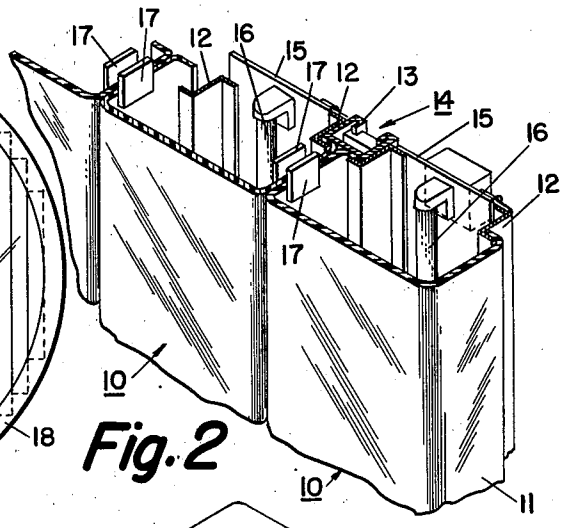



Fig. 2

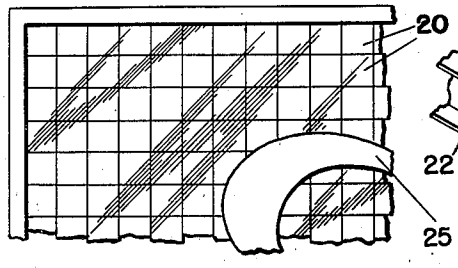



Fig. 3

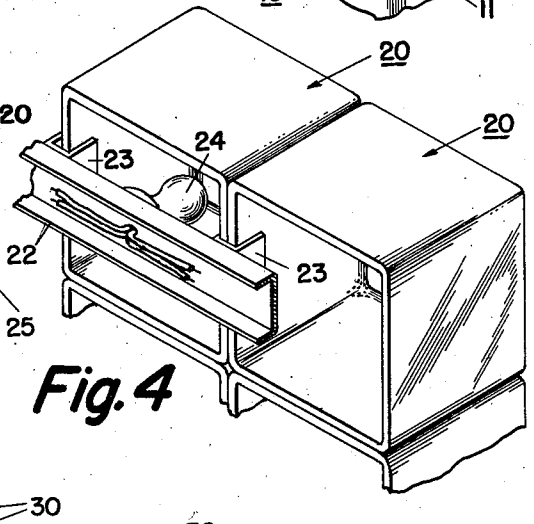



Fig. 4

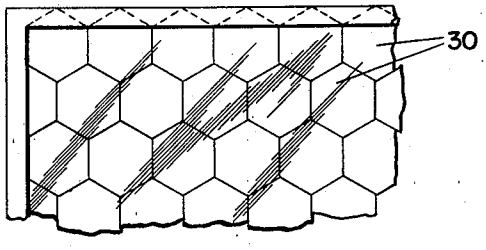



Fig. 5

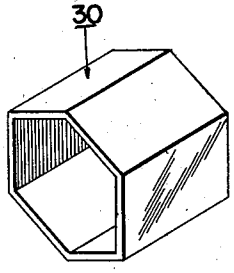



Fig. 6

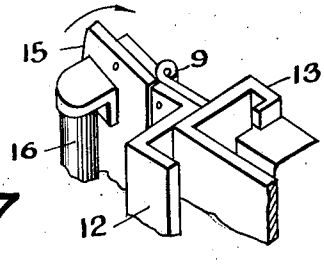



Fig. 7

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2,823,475

# SPECTACULAR SIGN

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Application March 21, 1956, Serial No. 572,870

1 Claim. (Cl. 40—130)

The present invention relates to signs of the type commonly referred to in the trade as "spectaculars." Such signs are of the variety that present extensive areas which may be illuminated when desired. More particularly it relates to signs of the afore-mentioned type wherein a weather-resistant plastic, such as the acrylic plastic sold under the trademark Plexiglas, forms substantially the entire display area.

Large, back-lighted, plastic-faced signs heretofore proposed have definite limitations and restrictions which to some extent have hindered commercial adoption thereof. Among these deficiencies are practical methods of attachment of the plastic to the supporting structure carrying the lighting elements. Where a continuous viewing surface of plastic extends over a substantial area of the sign, it has been customary to join one sheet or section of plastic, for example, by adhesion of another or other sections. Problems of expansion and contraction and adequate bracing of the plastic under these circumstances have heretofore rendered impractical the construction of plastic signs in sizes greater than about twenty feet in one dimension.

It is an object of this invention to provide signs of the spectacular variety in which difficulties heretofore confronted have been overcome. In accordance with the invention here described and illustrated the plastic-faced sign comprises a large number of comparatively small plastic modular units fitted in close proximity to one another, each unit having an exposed outer face from which inwardly extend walls through which each such unit is fastened to the sign supporting structure. The lighting elements are affixed to the supporting structure and extend into selected modular units. The outer faces of such units are of geometric configuration such that when the units are mounted on the supporting structure an extensive viewing area is presented which to the eye appears substantially continuous and of uniform contour. When in assembled relation the inwardly extending walls of a modular unit are close to the walls of immediately adjacent units, yet there is sufficient distance between them to provide for the small amount of expansion and contraction that may take place when such units are subjected to temperature changes incident to exposure of the sign to outdoor weather conditions.

The invention will be more clearly understood from the illustrative embodiments thereof shown in the accompanying drawing taken with the description which follows.

In the drawing, Figure 1 is a front elevation showing one form of the invention;

Figure 2 is an enlarged fragmentary perspective view taken along line 2—2 of Figure 1 in the direction indicated by the arrows;

Figure 3 is a fragmentary front elevation showing the upper left-hand corner of a further modification within the scope of this invention;

Figure 4 is a rear view in enlarged perspective of modular units in their relation to each other and to the supporting structure of the modification illustrated in Figure 3;



Figure 5 is a fragmentary front elevation showing the upper left-hand corner of a third modification of the invention; and

Figure 6 is a rear view in perspective of one of the plastic modular units used in the modification shown in Figure 5.

Figure 7 is an enlarged section of the upper middle portion of Figure 2, showing in detail how the back panel is hinged to the supporting structure.

Referring in detail to the modification shown in Figures 1 and 2, the sign comprises a plurality of plastic channels **10** having side walls **11** turned inwardly at their extremities to engage with and be securely held between members **12** and **13** which form a part of the rear supporting structure or base **14**. A panel **15** is hinged at **9** to the member **12** to permit access from the rear of the sign structure. The panel **15** carries lighting fixture **16** wired to a suitable source of electric current.

Each plastic channel **10** has affixed to each wall **11** thereof a plastic lug **17** to accommodate and maintain in alignment the channel placed in end to end abutment therewith and extending upwardly to the uppermost extremity of the sign.

The plurality of channels **10** as shown in Figure 1 present a circular display surface about the outer extremity of which is placed a circular frame **18**. The letter "A" shown on the display surface may be separately formed, for example, from plastic of a contrasting color, and affixed to the display surface by means well understood in the sign maker's art. Alternatively, it may be painted on said surface. The letter may also be formed by separate sections thereof, being fitted into corresponding cut-out portions of the channels themselves.

The modification shown in Figures 3 and 4 comprises a plurality of square, open box, plastic modulator units **20** which fit closely together. Each unit **20** is securely affixed at the inner extremity of one or more of its walls to the sign supporting structure **22** by means of clips **23**. The supporting structure **22** carries suitably wired lighting elements **24** which extend into the modular units. To the display surface of the sign fragmentarily shown in Figure 3 there is affixed a letter or other display **25**, a fragment of which is shown.

The modification shown in Figure 5 is similar to that shown in Figure 3 but formed of a plurality of hexagon-shaped modular units **30**, Figure 6 showing a single unit of this type.

The small plastic modular units, instead of conforming to one of the several configurations shown in the drawing, may be of any other suitable configuration, for instance, triangular or rectangular. Alternatively, separate units in a particular assembly may be of two or more configurations, for instance, triangles, rectangles and squares, or hexagons and triangles. The configuration, or configurations, in any given assembly of modular units is limited only in that the separate units be capable of being fitted closely together with the side walls in substantially parallel relation so that the extremities thereof may be affixed to the supporting structure.

Separate modular units in an assembly may be of a color different from that of surrounding modular units. Thus, letters or other indicia may be formed from a series of modular units of one color surrounded by modular units of a contrasting color. The color of a modular unit may be an integral part of the unit itself or may be applied by painting or dipping the unit, or the outer face of the unit, with or in a suitable pigmented coating material or dye.

Lighting elements may be placed in back of all, or a selected number, of the modular units. Since the lighting elements are carried by the supporting structure and are individually accessible from the rear of the sign, or,

if desired, by mounting the individual modular units on the supporting structure so that the unit itself may be relatively easily removed, replacement of a defective light bulb or tube may be readily accomplished. Individual lighting elements may be provided with reflectors, if desired, to produce distinctive lighting effects. Wiring to the individual lighting elements can be so arranged that various types of control, including circuit makers and breakers, to one or more of a series of them, can be utilized in any of the well-known ways whereby novel sign effects may be realized.

Since the separate plastic modular units employed in accordance herewith are relatively small, and a great number of them are used in the total assembly, they may be mass-produced with incident economy of manufacture. Also, the display surface and walls thereof may be relatively thin since each small unit is self-supporting and no weight from other units is carried thereby. Thus, less weight of plastic material is required and saving in cost results as compared with plastic signs of the several types heretofore known.

It is apparent that modifications in signs of the spectacular variety herein generally and specifically disclosed will readily suggest themselves. Such modifications as come within the scope of the appended claim are within the purview of this invention.



I claim:

A sign of the spectacular variety comprising a plurality of relatively small modular units of plastic through which light may pass, supporting structure for said units, each modular unit having at least two side walls parallel to each other and an intermediate wall between said side walls, the intermediate walls of said modular units being of a configuration such that they fit closely adjacent one another but sufficiently apart to provide for expansion and contraction due to temperature changes without substantial distortion of said intermediate walls, said intermediate walls presenting a substantially uninterrupted viewing surface, said parallel side walls of each of said modular units being directly secured to said supporting structure, means carried by said supporting structure comprising lighting elements each of which extends into a modular unit, and hinged means for closing the open ends of said modular units.

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