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[54] REFLECTOR FOR DECORATIVE ILLUMINATION AND LUMINOUS ADVERTISEMENT

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240/41.35 C, 41.35 F, 103 R, 103 C, 9 R;
40/130 J

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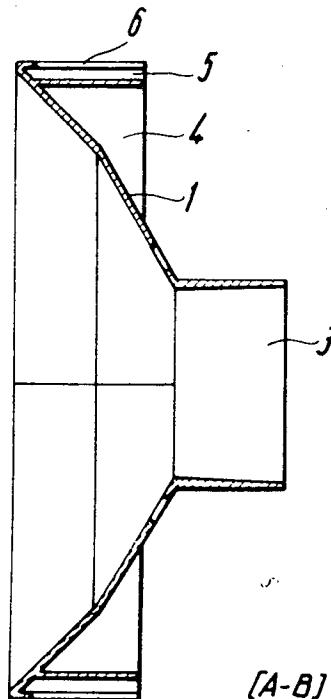
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[57] ABSTRACT

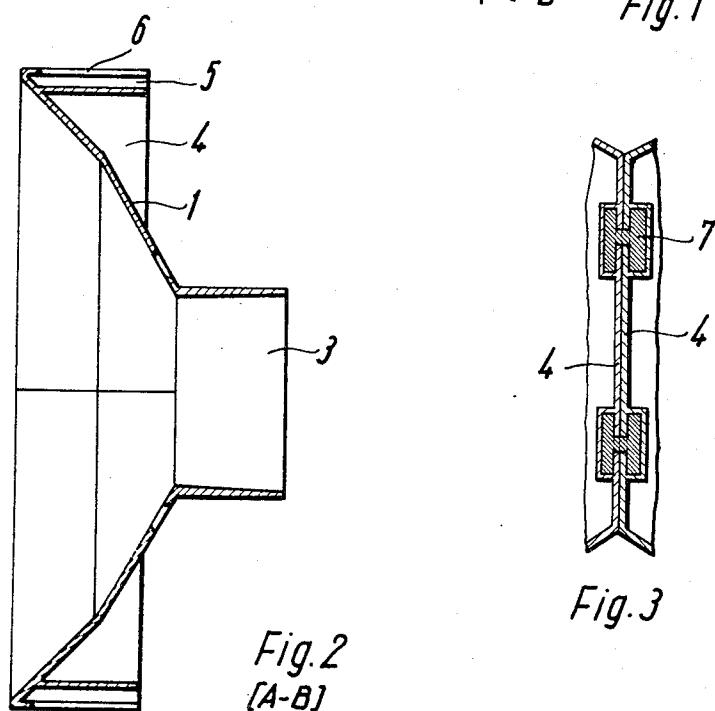
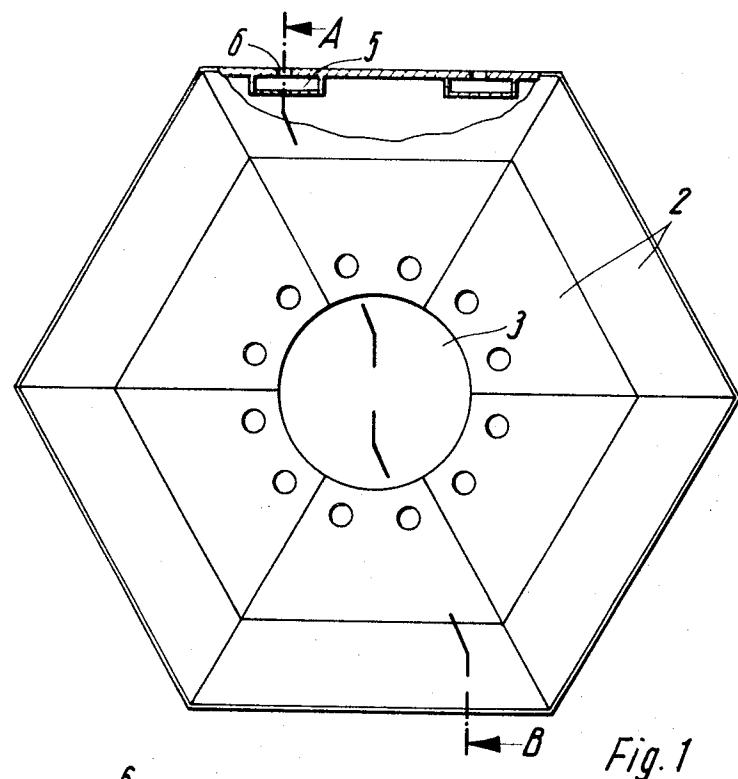
Reflector for decorative illumination and luminous advertisement comprised of a hollow pyramidal body with a central axis and having regularly, polygonal base area contour, further having configuration of at least two axially superimposed truncated pyramids, the body made of plastic or metal as deep-drawing body, the respective apex angles of the pyramids increasing with decreasing respective base area. A mounting flange with pockets for receiving connector elements, extends transverse to the base area, and from the outer periphery of the body at the largest base area of the pyramids.

4 Claims, 3 Drawing Figures



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REFLECTOR FOR DECORATIVE ILLUMINATION AND LUMINOUS ADVERTISEMENT

The present invention relates to reflectors cooperating with light sources for decorative illumination, luminous advertisement and other purposes.

It is an object of the present invention to provide a reflector that gives the impression to the viewer that he sees multiple light sources; the reflector is to be used as supporting and building block component for and in advertising signs having, e.g., larger letters, channel letters or the like.

In accordance with the preferred embodiment of the invention, it is suggested to provide a reflector in form of plural, superimposed, truncated pyramids with a common axis and polygonal bases, and having larger apex angles for the respective truncated pyramids of smaller base area. The outer periphery at the base of the largest pyramid is to have a mounting strip or flange extending transverse to the base area, i.e., parallel to a common axis of the pyramids. Preferably, two truncated pyramids are used, with a hexagon as polygon to define the base contour of each pyramid.

While the specification concludes with claims particularly pointing out and distinctly claiming the subject matter which is regarded as the invention, it is believed that the invention, the objects and features of the invention and further objects, features and advantages thereof will be better understood from the following description taken in connection with the accompanying drawings in which:

FIG. 1 is a front view of a reflector, constructed in accordance with the preferred embodiment of the invention;

FIG. 2 is a section view along line A-B of FIG. 1; and

FIG. 3 illustrates a detail, in section view, of two combined reflectors with connecting parts.

Preceding now to the detailed description of the drawing, in FIG. 1 is illustrated a reflector 1 having base contour of a regular hexagon. The reflector itself is constructed as two hollow superimposed truncated pyramids and the reflecting surfaces proper are constituted by twelve planar, internal surfaces 2. These surfaces are mutually inclined to each other to establish two six-sided pyramids of different apex angles.

The surfaces 2 themselves are the individual reflector elements, for reflecting the filament of a light bulb; or in case the bulb has a frosted envelope, the luminous bulb itself is reflected by each of these surfaces. Reflection may result by using deep drawn metal that is polished and provides by itself specular reflection. In case of plastic, the inner surfaces should be metallized to obtain reflective surfaces.

The light bulb (not shown) is arranged in the interior of the reflector construction and on the central and common axis of the double-truncated pyramid. The bulb may be of the two-color variety in that its surface below the portion of largest diameter has one color, the remainder of the bulb having the other color. In order to receive the bulb socket, a central opening 3 is provided in the reflector, receiving the electrical connecting components and socket etc., of the bulb.

The reflector is to be used as self-supporting component and carrier. Therefor, a mounting flange 4 is provided, transverse to the base area of the reflector and extending from the periphery of largest diameter, in hexagon contour, around the axis of the reflector unit;

the flange runs parallel to the pyramid axis. Plural such reflectors can be combined by connection of the respective mounting flanges 4 to establish large illuminating units such as letters, luminous areas, pictures, etc.

Each mounting flange 4 has on its inside at least one pocket 5 (plural pockets are shown in the drawing). The pocket extends transverse to the hexagon contour area base of the reflector and has rectangular cross section (in the plane of pyramid base). A central-symmetrically running slot 6 is provided for access from the outside to pocket 5 and running parallel to the axis of the reflector (see FIG. 2). The slot 6 serves for receiving a connector element 7, having H-shaped profile (see FIG. 3). The cross bar of the H traverses the aligned slots 6 of two juxtaposed reflectors. This way, juxtaposed reflectors are positively interconnected.

In cases it may be advisable to combine plural reflectors in integral construction to obtain subgroupings of plural reflectors as basic units or building blocks, reducing the amount of mounting work and handling needed at the installation site. As an example, one can think of barlike assemblies to be used as basic lines in the assembly of letters.

The invention has the advantage that very effective illuminating advertisement displays can be assembled at low cost with little expenditure and by means of basically simple construction. Also, the assembly may easily be taken apart. This is of particular advantage as decorations, window displays, etc., are frequently changed. The individual reflectors or subgroupings thereof may be made of plastic. As they are self-supporting and stable in themselves; even large configurations can be assembled without requiring additional support and carrier structure. The connecting element 7, as described, permits also quite rapid assembly and combining of many reflectors. Also, the reflectors can subsequently be equipped electrically subsequently, and bulbs can be inserted quite simply as each reflection is also the carrier of a lamp and bulb holder.

The invention is not limited to the embodiments described above but all changes and modifications thereof not constituting departures from the spirit and scope of the invention are intended to be included.

We claim:

1. A decorative illumination and luminous advertisement panel comprised of a reflector assembly having a plurality of adjacent reflectors each having a hollow pyramidal body with a central axis and having configuration of at least two axially superimposed truncated pyramids each of said truncated pyramids having a regular hexagonal base area, the body made of plastic or metal as deep-drawing body, the respective apex angles of the pyramids increasing with decreasing respective base area; each reflector having additionally a mounting flange on the body, extending about transverse to the base area of the largest base area of the pyramids; and

means for interconnecting adjoining mounting flanges of said adjacent reflectors.

2. Reflector assembly as in claim 1, the reflectors each being provided with a central opening, concentrical to the axis, for receiving a bulb socket.

3. Reflector assembly as in claim 1, each mounting flange provided with at least one pocket having a slot extending in axial direction for receiving a connector element of H-shaped profile as one of the means for interconnecting.

4. Reflector as in claim 1, there being two truncated pyramids with hexagonal base.

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