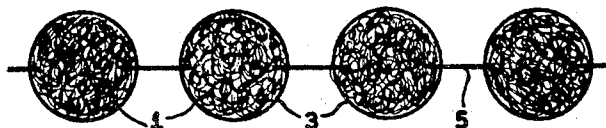
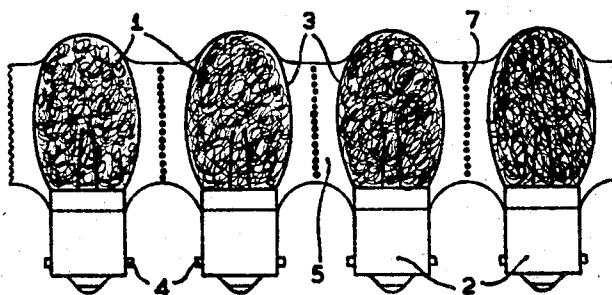
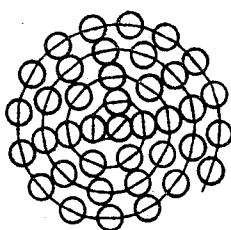
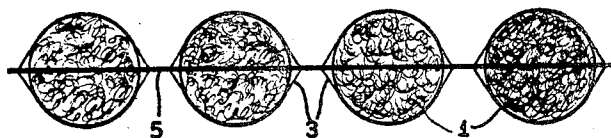
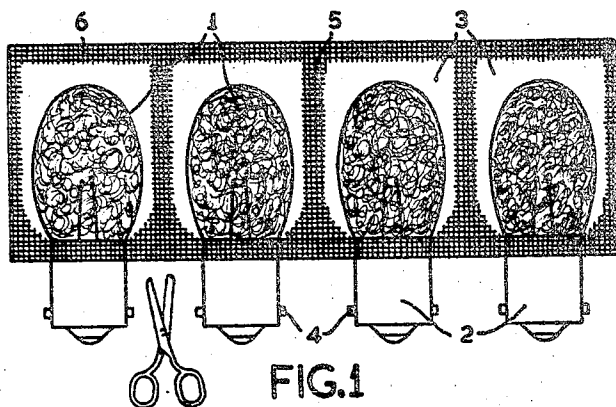


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FLASH LAMP PACKAGING
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1

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FLASH LAMP PACKAGING

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3 Claims. (Cl. 206—65)

As is well known, photographic flash lamps comprise a sealed glass bulb which contains an ignition filament and a material which is capable of combustion with the emission of actinic light. The contacts of the filament pass out of the bulb through a pinch and are connected to a lamp cap. When the lamp is ignited, the material which is enclosed in the glass bulb reacts actinically and generates a temperature such that the glass bulb is likely to be shattered as by an explosion. The photographer and the person to be photographed might be cut or their clothes might be burned by the hot glass splinters which fly about.

For this reason the glass bulb of flash lamps are provided with a transparent protective shroud, i. e. they are usually coated with a thin lacquer layer. This lacquer layer keeps together the glass splinters which are produced when the lamp bulb bursts and thus prevents the separate splinters from being scattered as by an explosion.

In order that the lacquer layer may function in this manner it must cover the glass bulb completely and consequently should not be cracked or damaged. The manufacture of such a flawless protective shroud is difficult and expensive. The protective shroud should also remain undamaged during use of the flash lamp. Consequently flash lamps provided with such protective shrouds must be inserted in an additional packing when they are transported. In practice, usually a number of flash lamps are packed in a small carton, and they are removed from this carton only a short time before use. Therefore single flash lamps must in no event be transported loose in the user's pocket or the like, since this may damage the thin lacquer layer, so that upon ignition of the flash lamp the photographer is likely to be cut or burned.

The additional wrapping envelope for flash lamps, however, generally is inconvenient when a few separate lamps are transported. In addition, the packing renders the flash lamps considerably more expensive.

According to the invention the above-mentioned disadvantages of the usual packing for flash lamps are obviated in that the packing is secured undetachably to the lamp and itself acts as a transparent protective shroud.

Consequently, the new packing acts not only as the usual lacquer layer which is applied by a laborious process, but also as the additional carton. This ensures a high saving in cost. It is an important advantage of the packing in accordance with the invention that the wrapping envelope may consist of a material which is so sturdy, resilient and also transparent; more particularly a synthetic resin, for example a foil of polyvinyl chloride that mechanical damage of the glass bulb or of the envelope itself cannot occur even with rough treatment. The flash lamps may thus be carried singly in a pocket without any risk; for due to the fact that the packing which acts as the protective shroud is secured undetachably to the lamp it is not likely to become detached therefrom.

2

The lamp end which carries the contact terminals extends beyond the transparent wrapping envelope so that the flash-lamp can be inserted without difficulty in the holder of a reflector without the need for any alteration of the wrapping envelope.

Preferably the transparent wrapping envelopes of a plurality of adjacent flash-lamps are connected together in a manner such that they can readily be detached. This permits of coiling the wrapping envelopes containing the flash-lamps after the manner of a machine-gun feed strip, the lamps being detached from this strip as required. As a result the storage of the lamps is facilitated.

Preferably the wrapping envelopes of a plurality of adjacent lamps contained in the packing are made from a coherent strip of the wrapping material, adjacent envelopes of the strip-shaped packing which contains a number of lamps being connected together by foil-shaped connecting portions which can readily be severed.

The invention will now be described more fully with reference to two embodiments thereof given, by way of example, in the accompanying drawing, in which:

Fig. 1 is a side view of a number of flash-lamps which are enclosed in a wrapping envelope with some clearance,

Fig. 2 is a plan view of Figure 1,

Fig. 3 is a side view of a number of flash-lamps contained in a wrapping envelope which narrowly engages the entire surface of the lamp bulbs,

Fig. 4 is a plan view of Figure 3, and

Fig. 5 shows diagrammatically a number of flash lamps which are coiled up after the manner of a machine-gun feed strip.

Glass bulbs 1 of flash lamps are provided with the usual lamp caps 2. Each glass bulb 1 is enclosed by a wrapping envelope 3 made from transparent foil-shaped material which narrowly fits the neck of the cap 2, the contact terminals 4 of the ignition wire contained in the glass bulb 1 projecting beyond the envelope. The wrapping envelopes 3 are connected together by means of intermediate parts 5 which can be readily severed so that a packaging shaped into the form of a feed strip is produced. The resultant packaging can be coiled up into a spiral form and thus can be carried as is shown in Fig. 5.

The wrapping envelopes 3 may consist of a strip-shaped synthetic resin foils, for example polyvinyl chloride foils, between which the flash lamps 1 are interposed. The seams 5 and 6 of the wrapping envelopes 3 are closed tight, preferably by welding.

Figs. 3 and 4 show a packing similar to that shown in Figs. 1 and 2; however, in this embodiment the wrapping envelopes 3 made of foil-shaped material narrowly engage the flash lamp bulbs.

In this embodiment also the connecting parts 5 can be produced by welding or the like.

When a flash lamp must be inserted in a reflector for use, it is taken from the packing in a simple manner by severing it together with its wrapping envelope from the adjacent envelope along the seam. This can be effected in a simple manner with the aid of a knife or a pair of scissors. When the wrapping envelopes are provided with a perforation 7 along their seams, detaching a single lamp can be effected without the use of a tool.

When the lamp is ignited to produce a flash, the novel packing acts as a protective shroud and ensures that the photographer is not cut by glass splinters if the lamp bulb should explode.

The foil from which the wrapping envelope is made may consist of any transparent synthetic resin, provided that it is tough and strong enough to act as a splinter

3

guard and on the other hand can readily be shaped into the required form by welding. In addition to polyvinyl chloride foils use may, for example, be made of foils from poly-ethylene or cellulose acetate.

If required, the foil-shaped wrapping envelope may be made from coloured synthetic resin so that the requirements of colour photography can be satisfied without difficulty. In addition, such foils can be readily and permanently printed so that the wrapping envelope can be provided with the required data, directions for use and the like without difficulty.

What is claimed is:

1. A package for flash lamps of the type susceptible to explosion upon use each having a bulb portion and a base provided with contacts thereon comprising an integral strip of packaging material constituted of a plurality of transparent protective sheaths surrounding the bulb portions of adjacent flash lamps, and intermediate,

4

readily-detachable, strip-shaped members connecting said transparent protective sheaths, said protective sheaths surrounding said bulb portions of said flash lamps and leaving the base contacts exposed.

2. A package for flash lamps as set forth in claim 1 wherein said strip-shaped members are perforated.

3. A package for flash lamps as set forth in claim 1 wherein said package material is a synthetic resin.

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