CONTAINER FOR LIGHT SENSITIVE FOIL

John D. Speakman, Hudson, Ohio, assignor to Metalphoto Corporation, a corporation of Ohio
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1. 3,490,578
4 Claims

ABSTRACT OF THE DISCLOSURE

A container for the storage and dispensing of metal foil from a coil, the foil being one which has a light sensitive composition on at least one of its faces.

This invention relates to a container for the storage and dispensing of metal foil from a coil, the foil being one which has a light sensitive composition on at least one of its faces.

One object of the invention is to provide a sturdy, light tight, inexpensive container suitable for shipping, storing and dispensing of metal foil or other strip material having a light sensitive composition thereon, and which is readily converted from a shipping and storage container to a dispensing container, and which may be restored to its construction as a storage container in a very simple manner.

This and other objects will be apparent or will be pointed out in the description which follows taken with the drawings in which:

FIGURE 1 is a view of the container of this invention seen in perspective, showing the container as it is used for shipping and for storage of a coil of light sensitive foil;

FIGURE 2 is an exploded view showing the individual parts of the container;

FIGURE 3 is a view of the container of FIGURE 1 with an outer sleeve removed, showing the container as it appears in preparation for use as a dispenser of foil or strip; and

FIGURE 4 is a section taken on plane 4--4 of FIGURE 3.

As seen in the drawings, the container 10 of the present invention includes an upper lid 12, a lower lid 14 and a cylindrical sleeve 16 which fits snugly on flanges 18 extending inwardly from the flat outer face of the upper lid and lower lid. The sleeve 16 is provided with stepped end portions 24 so that the upper lid and lower lid can be readily fitted onto the sleeve. Lower lid 14 is glued to an inner sleeve 22, upper lid 12 being left unglued for easy removal from sleeve 16 when access to the coil is desired.

Lids 12 and 14 and sleeve 16 are made of opaque, moisture-proof material, such as cardboard, plastic, metal or the like, depending on whether the container is intended for single use or for re-use with additional coils of material to replenish the supply as each coil is completely dispensed. Fibreboard is a preferred material. All parts of the container which come in contact with the photosensitive aluminum are coated with a non radioactive plastic because most fibreboards are radioactive and would expose the material. This also allows the coil to turn more smoothly than if it were not coated with plastic. It also keeps the fibreboard from fraying or sloughing off as the container is turned.

Within the confines of the container 10 there is provided a space for storing a coil 20 of light sensitive metal foil, for example, aluminum foil provided with a photosensitive coating on one face, e.g., by the process described in United States Patent 2,766,119. A liner 22 encircles coil 20. Liner 22 consists of a sleeve portion and a slit 26. As noted above, liner 22 is glued to lower lid 14. After a portion of the coil has been dispensed and the remainder is to be returned to storage, sleeve 16 is slipped over liner 22 to reassemble the container. Within coil 20 is a spool or core 30 of plastic, cardboard or metal or any other suitable material of sufficient stiffness and strength to support the coil. A disc 31 positioned over each end of core 30 suspends the core, with the metal foil within the container and also blocks off entry of light into the end of the container when either lid 12 or lid 14 has been removed.

It is believed that the manner in which this container is used will be readily understood from the description above.

The scaled container 10 with the coil 20 of light sensitive material stored therein is taken into a darkroom or a room equipped with a photographic safelight or other illuminating means which does not fog the photosensitive composition on the foil.

Tapes 28 seal the flanges 18 of cover lid 12 and base lid 14 to sleeve 16. Tapes 28 are cut so that the lids and sleeve 16 can be separated. While holding the base firmly, the user lifts the cover 12 and the outer sleeve 16 off the base 14, exposing the inner liner 22 and slit 26. Then the user rotates the package so that the coil and liner rotate relative to one another until the loose leader end of coil 20 passes through slit 26, e.g., as shown in FIGURE 3. The desired length of foil is then torn or cut from the main body of coil 20. Then with a tab of foil protruding as a leader for future use, the liner 22 is squeezed to close slit 26 and sleeve 16 is slid over the liner. The cover lid 12 is replaced so that the light tight coil container can be returned to storage in a cool dry place in which the foil can remain without any adverse effect on the photosensitivity of the foil.

I claim:

1. A container for storage and dispensing of metal foil comprising:
   a spool on which a coil of metal foil is adapted to be supported so that it can be rotated;
   end caps on said spool adapted to butt against the end surfaces of the coil so that light does not penetrate the spaces between the turns of said coil;
   a sleeve adapted to encircle said coil, said sleeve being provided with a slit which extends the length of said sleeve and through which said foil may be pulled to unwind it from the parent coil;
   a second sleeve adapted to completely encircle the first said sleeve;
   and end caps adapted to engage the end portions of said second sleeve and to serve as top and bottom covers when said container is completely assembled.

2. The container of claim 1 wherein the second said sleeve is provided with a stepped construction at each end so that flanges on said end caps can engage said second sleeve in a light-tight assembly.

3. The container of claim 1 in which the bottom end cap is glued to said first sleeve.

4. The container of claim 1 including, in addition, a plastic coating on the inner surface of said container.

References Cited

UNITED STATES PATENTS
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JOSEPH R. LECLAIR, Primary Examiner
JOHN M. CASKIE, Assistant Examiner