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MEANS FOR PROVIDING A SEMI-PERMANENT IRIDESCENT DISPLAY

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ABSTRACT OF THE DISCLOSURE

Means for providing a semi-permanent iridescent display comprising a pair of overlying sheets, one being translucent with an iridescent dye and the other being opaque. The sheets having smooth surfaces forming an interface, and one of said sheets being of a pliable plastic with its interface surface tending to adhere to the interface surface of the other.

This invention relates generally to iridescent displays and more particularly to means for making the same.

BACKGROUND OF THE INVENTION

It is generally known that when a material containing an iridescent dye or pigment is applied to an opaque surface, reflected rays of light appear to make such material glow. This general concept has been used in the manufacture of reflective types of signs, particularly signs which are to provide a visual display at night when hit by a beam of light.

Using this concept, it has been found that by appropriate selection of materials and pressure an iridescent display can be made which will remain as presented for extended periods of time. When desired, the display can be removed and by reapplication of pressure a new display can be made. An article of this type can be used in many ways. However, probably one of the most outstanding embodiments would be in toys for children.

There have been many various types of toys which children could use to practice drawing and/or writing, when finished the drawing or writing could be removed so the toy could be reused. One of the most common of these was the magic slate which, at best, had but a limited life. Children would quite often scrape the paraffin coating off of the backing sheet which would destroy the toy and which, if eaten, could make them ill. Another toy of the same general type was provided in box form having a plastic face, a powdered metal within the box which tended to adhere to the face, and a stylus which was operated by knobs for selectively removing portions of the powder from the face. When the case or its face broke, the powder escaped and could be injurious if inhaled.

Accordingly, an object of the present invention is to provide means for making a semi-permanent iridescent display which is rugged of construction and cannot be injurious to the health of the user.

And, another object of the present invention is to provide the foregoing display means wherein an existing display can be permanently removed with facility and a new display can be made.

The foregoing and other objects and advantages of the invention will appear more fully hereinafter from a consideration of the detailed description which follows. Although a preferred embodiment of the invention

is for use in toys, it should be expressly understood that the description as related to toys is for illustration purposes only and is not to be construed as defining the limits of the present invention.

DESCRIPTION OF THE INVENTION

In accordance with the present invention, a sheet of translucent material and a sheet of opaque material are provided, one sheet overlying the other so that the adjacent surfaces of the sheets form an interface. The interface surfaces are to be smooth, and one of the sheets at least is to be plastic. The interface surface of the plastic sheet is to have the characteristic which tends to cause the sheets to adhere to one another.

While one of the sheets is to be of a plastic, the other sheet may also be plastic or any other suitable material. Both of the sheets may be non-rigid, but one must be pliable. Obviously, if both sheets are non-rigid, a rigid backing sheet may be required.

An iridescent dye may be applied to either surface of the translucent sheet or, preferably, added to and dispersed throughout the translucent material before the sheet is made. The opaque sheet preferably is white or of a light color to take full advantage of the light reflecting characteristics of such colors.

A suitable example of the foregoing would be a translucent sheet of plexiglass, acrylic plastic or glass with a green or blue iridescent dye dispersed throughout the sheet. With the foregoing, a pliable sheet of white vinyl was used. The interface surface of the vinyl sheet had a patent leather like finish.

With both sheets being non-rigid, pressure against the outer surface of either sheet will cause a corresponding intimate contact at the interface. The result is total reflection of light at the selected point or points of intimate contact at the interface which produces the iridescent display.

By separating the sheets, the intimate contact at the interface is terminated and the display is removed.

Although several forms of the invention have been described in detail, it is to be expressly understood that the invention is not limited thereto. Various changes may be made in the design and arrangement of parts without departing from the scope and spirit of the invention as the same will now be understood by those skilled in the art.

We claim:

1. Means for providing an iridescent display corresponding to selective pressure applied thereto, comprising:

a sheet of translucent material having an iridescent dye at at least one surface thereof;

a sheet of opaque material;

at least one of said sheets being a pliable plastic;

said sheets overlying one another each having a smooth surface adjacent to and in contact with the smooth surface of the other forming an interface;

said smooth surfaces being urged into intimate contact with each other by selective pressure applied to said means reslting in an iridescent display;

said smooth surfaces adhering to each other when in intimate contact at the interface thereby maintaining an iridescent display; and

said sheets being separable from one another thereby terminating the intimate contact at said interface and the iridescent display.

2. Means in accordance with claim 1, wherein:
said iridescent dye is disposed on said one surface of said translucent sheet.

3. Means in accordance with claim 1, wherein:
said iridescent dye is dispersed throughout said translucent sheet.

4. Means in accordance with claim 1, wherein:
one of said sheets is rigid and the other of said sheets receives pressure applied to said means for forming the iridescent display.

5. Means in accordance with claim 1, wherein:
both of said sheets are pliable; and

a rigid backing sheet is provided behind one of said sheets.

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