METHOD OF DECORATING OBJECTS WITH WAX

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ABSTRACT
The object to be decorated is dipped into a bath of water having a molten wax film floating thereon of different colors. Wax preferably in swirls produced by a heat gun or torch which also keeps the film molten. The bulk water temperature is kept from 5°C to 15°C below the melting point of the wax film and the surface water and wax film are maintained above the melting point of the wax.

9 Claims, 4 Drawing Figures
METHOD OF DECORATING OBJECTS WITH WAX

BACKGROUND OF THE INVENTION

This invention relates to a method of decorating objects with wax by the floating film process.

Heretofore, candles have been decorated by this process by floating different colored wax particles upon a water bath kept at a temperature well above the melting point of the wax as set forth in U.S. Pat. No. 2,817,225 issued to Walter Weglin on Dec. 24, 1957, and dipping the candle through the wax particles and into the hot water bath to produce integration between the candle and the wax particles adhering to its surface.

Where, as described in the above patent the bulk water temperature is slightly below the melting point of the wax particles the latter form a gelatinous mass which adheres to the candle in a raised design similar to scale-like incrustations.

One of the problems with the Weglin process as described lies in the general inability to obtain clear demarcation between different colors in the decorative pattern, and in a tendency for the decorative pattern to become muddy and cloudy.

While such process has been referred to as marbleizing, it has not been capable of reproducing certain desirable marble effects.

The present invention is based upon the discovery that the more desirable marble effects may be obtained by the herein specified improvement of the Weglin process.

SUMMARY OF THE INVENTION

In carrying out the present invention the bulk water temperature is maintained substantially below the melting point for the wax film, and the latter and the upper surface of the water are maintained at a temperature preferably substantially above the melting point of the wax.

The temperature of the wax film is maintained by the use of a torch, heat gun or other means which can be manipulated to control the position of the different colored wax films and even produce a swirling film pattern through which the object is dipped.

The cooler bulk water temperature serves to quickly set the decorative coating on the object being dipped as the dipping or submergence progresses. The object is then removed from the bath preferably at a rate to avoid secondary coating effects.

It has been found that the wax film has little tendency to adhere to the object as the latter rises through the film, although good adherence results upon the downward dipping of the object through the film.

After the decorative coating has been applied to an object and is thoroughly dried the object may be dipped into or sprayed with transparent wax to give it a desired glossy finish and protect the decorative coating. A quick dip in cold water will set the finishing coat thus provided.

The process has been applied to produce multi-color decorated and marble effects upon wax candles of all shapes and various art objects of other materials such as plaster of paris, sand and the like.

When non-wax objects are to be decorated, they should be first coated with a thin layer of transparent wax.

3,867,173

BRIEF DESCRIPTION OF THE DRAWINGS

The accompanying drawings illustrate the best mode presently contemplated for carrying out the invention.

In the drawings:

FIG. 1 is a perspective illustration of a heated container suitably filled with water and the initial adding of a multi-color wax film thereto;

FIG. 2 is a top plan view of the apparatus of FIG. 1 showing the application of the torch to produce a swirling of the colored films upon the water;

FIG. 3 is a perspective view of the apparatus showing the dipping of a candle through the wax film and into the water;

FIG. 4 is a perspective view of a candle after decoration by the process.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to the drawings, the heated container 1 is suitably filled with water 2 to a depth to fully submerge the object to be decorated when dipped therein.

The container 1 and water 2 are initially heated to a temperature of about 5° to 15° below the melting point of the colored wax to be employed and is maintained at this temperature at all times.

Separate puddle-like globules 3 of different colored molten wax preferably at a temperature substantially above the melting point are dropped upon the surface of the water and float thereon.

The wax globules 3 are prevented from congealing by employment of a heat gun or torch 4 which plays thereon at an angle and tends to spread the globules into a thin film 5 which may coalesce or take on a swirling pattern as shown in FIG. 2 depending upon the manipulation of the torch.

For this purpose the torch 4 is generally held at an angle of from 20° to 45° from the horizontal and is moved over the surface of the bath in different directional control to produce the desired pattern of swirl or color positioning.

The nearer the torch 4 is held to a 20° angle from the horizontal the more rapid is the swirling action of the wax film and the thinner the streaks of color therein. The thickness of the film in any region may also be reduced by playing the torch above it. The effect of the torch is to provide an air stream blast against the surface of the wax film to establish the desired swirling of the colors.

The invention has been applied to the decoration of candles, preferably of a paraffin wax base composition, having a melting point generally between 130° and 140° F. The bulk water temperature for a candle of this melting point is preferably about 125° F.

The wax of film 5 is preferably of the same type of wax as the candle, although it is possible to employ higher melting point waxes such as those of stearate base so long as they are compatible with the wax of the candle.

The wax film 5 and the upper thin stratum or surface water of the bath are preferably kept at a temperature generally in excess of about 170°F to assure that the film is highly fluid to properly coat the object being dipped.

The candle 6 or other object to be dipped while preferably at normal room temperature is then slowly submerged in the bath by moving it downwardly vertically.
3,867,173

or at a desired angle through a selected location in the wax film or swirl pattern as shown in FIG. 3 whereby the wax film adheres to and is progressively drawn by cohesion of the wax film toward and downwardly with the candle in the desired color pattern.

While it is preferable to remove the candle from the bath reasonably soon after dipping, it is possible to leave the candle in the bath for some time without danger of undue heat softening since the bulk temperature of the water is generally maintained below the softening or plastic range closely approaching the melting point of the wax.

Upon removal of the candle 6 from the bath the wax film has little tendency to adhere thereto and the initial color pattern generally remains clear and bright on the candle.

After removal and thorough drying the candle or other object is preferably over-dipped in a molten bath of clear transparent wax and immediately immersed or quenched in cold water to give it a glossy appearance and protect the decorative coating thereon.

The decorated candle, as shown in FIG. 4, has clear bright color lines. A pattern such as that shown in produced by rotating the candle at irregular speeds successively clockwise and counter-clockwise as it is dipped into the bath. The multi-color film freezes almost instantly upon the candle as the two contact each other.

Because of the sharpness of the color pattern, it is possible to obtain decorative effects heretofore unattainable with the Weglin process.

Also it is possible to decorate objects of other material where compatible with wax. These include various works of art made from plaster of Paris, rubber or sand molding materials. However, to insure proper adhesion of the decorative coating to such objects it has been found advisable in some instances to pre-coat the object with a clear wax prior to applying the present process thereto.

It is also possible to heat the wax film on the bath by separate means from that employed to impinge an air stream upon the film for creating the desired color pattern and film thinness.

A few drops of mineral oil added to the wax film serves to preserve separation of the colors therein.

Various modes of carrying out the invention may be employed within the scope of the following claims, particularly pointing out and distinctly claiming the subject matter which is regarded as the invention.

I claim:

1. A method of decorating an object with wax, comprising immersing the object in a water bath in contact with a molten film of multi-colored wax floating on said bath while maintaining the bulk water temperature of said bath substantially below the melting point of the wax, and supplying heat to the film of wax to maintain the same at a temperature substantially above its melting point.

2. The method of claim 1 in which the bulk water temperature is maintained at from 5° to 15° F. below the melting point of the wax, and the surface water and wax film are maintained at a temperature generally in excess of approximately 170°F.

3. The method of claim 1 in which the water temperature of the bath is stratified, with the bulk temperature maintained at approximately 125°F and the surface water temperature maintained at approximately 170°F.

4. The method of claim 1 and thereafter over-dipping the object in a bath of clear wax followed by a cold water dip to protect the decoration.

5. The method of claim 1 and impinging a stream of air upon the top of the wax film to produce a color pattern therein by a swirling action.

6. The method of claim 5 in which a heat gun is employed to both heat the wax film and produce the color pattern therein, said gun being disposed at an angle of from 20° to 45° from the horizontal.

7. The method of claim 6 in which said heat gun is in the form of a torch applying both heat and air flow to the surface of the wax film.

8. The method of claim 1 and adding mineral oil to the wax film to control the separation of colors therein.

9. The method of claim 5 and adding mineral oil to the wax film to control the separation of colors therein.