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2,373,211

METHOD OF PRODUCING MARBLEIZED WRINKLE FINISHES

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Fig. 1.

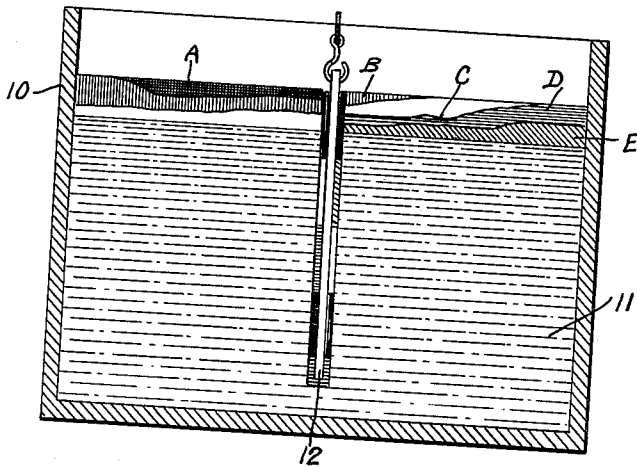


Fig. 2.

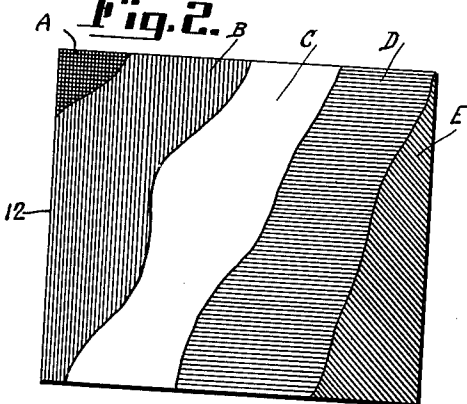


Fig. 3.

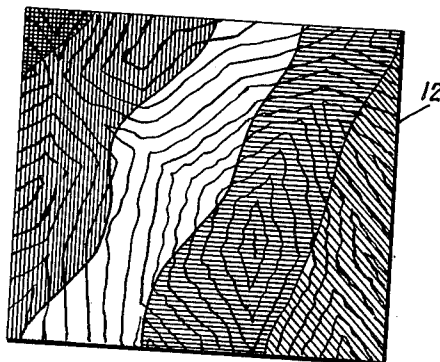
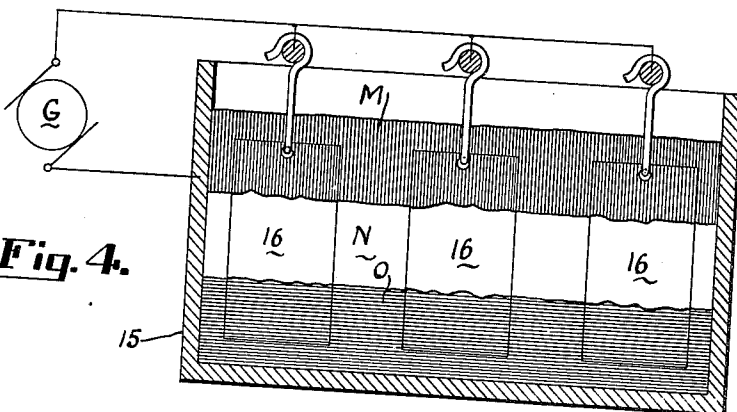


Fig. 4.



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METHOD OF PRODUCING MARBLEIZED WRINKLE FINISHES

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2 Claims. (Cl. 117-39)

This invention relates to marbleized finishes and more particularly to an improved method of finishing articles in a marbleized or mottled wrinkle finish.

Heretofore, in the application of wrinkle finishes use has been made of dipping, spraying, flow coating, and doctor blade methods for coating the articles. In order to apply a number of coatings to an article, it has been necessary to mask the article where a different coating is to be applied. This is a cumbersome and time consuming process and greatly increased the cost of the finished product.

It is an object of this invention to devise a method of applying several different coating compositions to an article in a single operation and drying the coating composition to produce a marbleized wrinkle finish.

A typical example of the method utilized in producing the marbleized wrinkle finishes of this invention is illustrated in the drawing, wherein

Figure 1 shows a vertical sectional view taken through a dipping tank containing striated coating compositions which are floated on the surface of water into which the articles to be coated are immersed.

Figure 2 illustrates an article having striated coating films thereon preparatory to drying to a hard finish.

Figure 3 shows the finished article having a marbleized wrinkle finish.

Figure 4 illustrates a modification of the process illustrated in Figure 1 wherein electric current is used for coating the articles with the different coating compositions to produce a mottled wrinkle finish therefor.

Referring to the drawing in detail, there is illustrated the method of finishing articles to provide them with a marbleized wrinkle finish according to this invention. In Figure 1, a tank or suitable liquid container 10 is used which is of a size such that the articles to be coated can be received therein. The tank 10 is substantially filled with water 11, as illustrated in Figure 1 so as to completely cover an article such as 12 when lowered into the tank.

One or more differently colored enamels or lacquers, as illustrated at A, B, C, D and E is poured onto the surface of the water, forming distinct layers. The container is of such a size that the articles can be completely immersed in the liquid and arranged so that the adhesion exerted between the enamel coatings and the side walls of the container does not interfere with the proper coating of the articles. If desired, the

container may be rubber lined or the side walls otherwise coated to reduce the adhesion of the coatings to the walls of the container. In this way, the enamel coatings more readily coat the surface of articles lowered into the water upon which the different coating compositions are floated.

In applying the coating to an article 12, as illustrated in Figure 1, the article is immersed into the tank 10 through the overlaid wrinkle enamel coating compositions A, B, C, D and E and down into the water 11. Upon withdrawing the article, a film of enamel remains thereon in striated layers. Thereafter, the coated article 12 is allowed to drip and is then subjected to a baking or drying temperature to produce a hard, durable wrinkle finish simulating marble, as illustrated in Figure 3. Several different colored wrinkle finish compositions may be floated on the surface of the water at the same time. By gently stirring the overlaid coating compositions, the differently colored coatings will be mixed in superimposed layers so that when the object to be finished is immersed therein and removed, the article receives a striated film made up of the various coating compositions. By slowly rotating the object being coated as it is withdrawn, a spiral-like streaked finish is obtained.

The wrinkling finish compositions utilized preferably are compounded as disclosed in the patents to Root 1,732,661, 1,896,594, 1,950,417, and 1,976,191. The coated articles are baked at a temperature of between 170° F. and 400° F., depending upon the particular formulation used and the type of article being finished. Low temperature baking may be carried out at 185° to 250° F. for one to three hours, which produces a hard, durable finish. At higher baking temperatures, a corresponding shorter time is required to produce a satisfactory wrinkle finish. During the baking treatment, all water is driven off and a hard resistant wrinkle finish produced.

In the modification shown in Figure 4, a similar tank 15 is utilized wherein a plurality of different coating compositions, M, N, and O, are placed and the articles, as shown at 16, are suitably supported in the tank.

Preferably, the coating compositions used are in the form of emulsion and comprise different pigment colors. Other vehicles may be utilized which will function as an electrolyte for conducting electric current. In order to produce a mottled or striated finish on the articles 16, in this instance, the walls of the container are made the anode and the articles the cathode. Direct

current is supplied from the generator G and electrical connections made to the tank and articles being coated as illustrated in Figure 4. After the articles have been sufficiently coated with the different coating compositions, they are removed and dried or baked to produce a wrinkle finish. It will be appreciated that with the use of different coating compositions modifications in the electrical connections and current density may be made to produce the desired coating effect.

It will be understood that various types of coating compositions of the oil or pyroxylin base may be utilized in producing the marbled finish of this invention. Further, it will be understood that this invention is not limited to the exact details of the method steps described and that variations may be made to suit different conditions and uses.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent is:

1. The method of producing articles having a marbled wrinkle finish comprising the floating of a plurality of wrinkle drying coating films in the form of striated layers over the surface of a body of water, immersing the article to be coated through the striated layers of coating compositions and into the body of water, removing the article, and drying the coating film to produce a hard, wrinkle finish resembling marble.

2. In the method of finishing articles to provide a marbled finish therefor, comprising the steps of floating a plurality of wrinkle finish compositions in the form of striated layers over the surface of an aqueous body and immersing the articles to be finished through the striated layers and into the aqueous body, rotating the article while removing the same to provide a striped mottled coating film on said article, and thereafter drying the coating film to a hard wrinkle finish.

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