

cathode. The aluminum plate was thus anodized in an electrolytic bath containing 2% of oxalic acid by means of an ac current for 10 minutes at a current density of 1 A/dm<sup>2</sup> and a temperature of 25° C. Then, the aluminum plate was anodized in the same bath by a dc current for 30 minutes at a current density of 0.5 A/dm<sup>2</sup> and a temperature of 25° C. The anodized plate was washed with water, and boiled for 20 minutes in distilled water. After boiling, the resist coating was removed by dichloromethane, and washed with water to obtain an aluminum plate which was colored yellow in the desired pattern.

### EXAMPLE 3

A laminate plate having one surface clad with copper was used. The same ultraviolet light-curable paint as used in Example 1 was coated to a thickness of 10 microns on the entire copper-clad surface of the laminate plate. The coated plate was then passed through the primary ultraviolet irradiating device at a speed of 20 meters/min. to pre-cure the coating. Then, a predetermined circuit pattern was printed on the pre-cured layer coating by using a lithographic offset printing press and the same lithographic black ink as used in Example 1. The plate was then passed through the second ultraviolet irradiating device at a speed of 20 meters/min. to cure that portion of the pre-cured coating which did not have the printed layer thereon. Then, the pattern was developed by using the same developing device as used in Example 1 with a developing solution composed of equal proportions of ethyl acetate and 1,1,1-trichloroethane.

The plate was dipped for 10 minutes in an etchant solution at 53° C. containing 20% of cupric chloride and 15% of conc. hydrochloric acid to etch the pattern portion. The etched plate was washed with water, and the resist coating was peeled off with ethylene dichloride to obtain a laminate plate in which the copper foil remained in circuit form. The resolution of a space between adjacent copper circuits was about 20 microns, and better than the resolution of that obtained by a screen printing method with an etching resist ink.

### EXAMPLE 4

The same ultraviolet light-curable paint as used in Example 1 was coated to a thickness of 15 microns on the entire surfaces of a glass plate having a size of 40×100 mm with a thickness of 3 mm by means of a roll coater. The coated plate was passed through the primary ultraviolet irradiating device at a speed of 20 meters/min. to pre-cure the coating. A predetermined pattern was printed on the pre-cured coating by using a relief offset printing press (a relief printing plate prepared from V10DIC U-82, a photosensitive resin, was mounted on the plate cylinder) and the same lithographic black ink as used in Example 1. The same secondary ultraviolet irradiation and development as in Example 3 were carried out to form a glass plate having a resist pattern. Emery having a particle size of 60 was blown against the surface of this plate under a pressure of 5 kg/cm<sup>2</sup>. The surface was washed with water and then the resist coating was removed by dichloromethane. The plate was again washed with water to obtain a decorative glass plate in which the pattern portion was roughened.

What we claim is:

1. A method for forming a cured resin coating having a desired pattern on the surface of a substrate, which comprises
  - a first step of applying a coating of an ultraviolet light-curable resin to the surface of the substrate;
  - a second step of pre-curing said coating by irradiating ultraviolet light thereto;
  - a third step of applying a printed layer of a predetermined pattern partly to the surface of the pre-cured coating with a light-insensitive non-transparent printing ink;
  - a fourth step of irradiating ultraviolet light to the product obtained in the third step to cure completely that part of the pre-cured coating on which the printed layer is absent, while that part of the pre-cured coating which exists beneath the printed layer is maintained intact; and
  - dissolving or peeling the printed layer and the pre-cured layer existing beneath it, whereby the resin coating having the desired pattern which is in a complementary relation to the pattern of said printed layer is formed on the surface of the substrate.

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