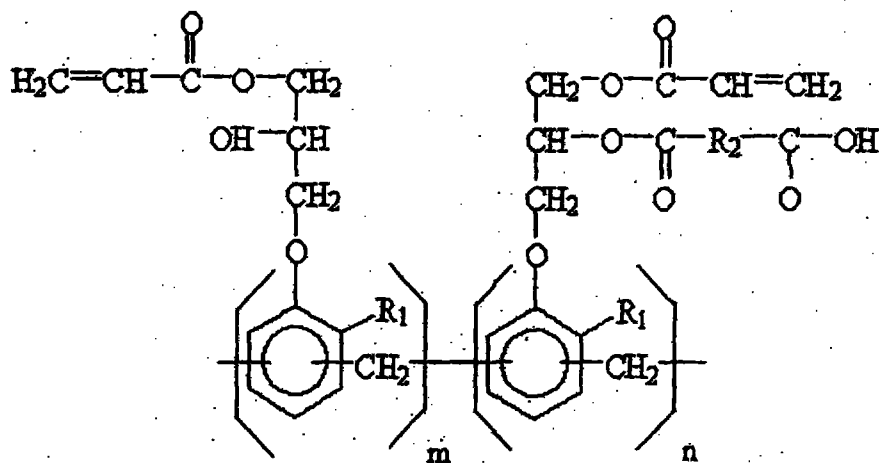


PHOTOSENSITIVE THERMOSETTING RESIN COMPOSITION

ABSTRACT

A photosensitive thermosetting resin composition comprising the following essential ingredients:

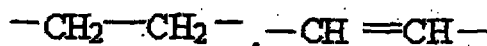
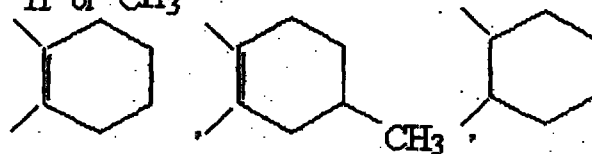
- (A) a photopolymerizable prepolymer (formula I), which is prepared by reacting epoxy resin (A1) containing at least two epoxy groups with mono-carboxyl acid (A2) containing a vinyl group, and then reacting with saturated or unsaturated polybasic acid anhydride (A3);
- (B) a thinner, which is selected from photopolymerizable vinyl monomer (B1) and/or organic solvent (B2), alone or in combination;
- (C) a photopolymerizable initiator;
- (D) an epoxy resin, comprising a soluble crystal state epoxy resin (D1) which contains two epoxy groups and is not soluble in the utilized thinner at room temperature but soluble at 60 ~ 80 .degree.C. and/or an epoxy resin (D2) which contains at least two epoxy groups and is soluble in the utilized thinner at room temperature; and
- (E) an inorganic filler;



where m and n are integer, $m + n \geq 20$

R_1 : H or CH_3

R_2 :



Said composition shows excellent photocurable capability and superb alkali developing capability, particularly its resolution capability of developing (line width) can reach 25 μm ; its cured product further shows excellent characteristics in adhesion, chemical resistance, insulation resistance, electroplating resistance, especially in heat resistance, electroless gold plating resistance, electroless nickel plating resistance, and electroless tin plating resistance.