

# United States Patent [19]

Eisenbraun et al.

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[54] **METHOD FOR PRODUCTION OF ELECTRONIC COATINGS**

[75] Inventors: Allan A. Eisenbraun; Wesley C. Blocker, both of Baton Rouge, La.

[73] Assignee: Ethyl Corporation, Richmond, Va.

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### Related U.S. Application Data

[62] Division of Ser. No. 255,747, Oct. 11, 1988, Pat. No. 4,997,869.

[51] Int. Cl.<sup>5</sup> ..... B05D 3/12

[52] U.S. Cl. .... 427/240; 427/346; 427/385.5; 524/600; 528/176; 528/188; 528/353

[58] Field of Search ..... 427/240, 346, 385.5; 524/104, 173, 233, 600; 528/353, 176, 188

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*Primary Examiner*—Norman Morgenstern

*Assistant Examiner*—Terry J. Owens

*Attorney, Agent, or Firm*—John F. Sieberth; Richard L. Hansen

### [57] ABSTRACT

In humid atmospheres (e.g., 40% relative humidity or above) solutions of 2,2-bis(3,4-dicarboxyphenyl)hexafluoropropane dianhydride/2,2-bis[4-(aminophenoxy)phenyl]hexafluoropropane polyimides tend to be unstable in the sense that during spin coating operations undesirable precipitate formation occurs on the rotating surface of the wafer. The result is the formation of unacceptable coatings due to their irregularity and lack of uniformity. Described are solutions of these polyimide polymers in a solvent containing one or more liquid aromatic hydrocarbons having a boiling point at least about 110° C. and one or more dipolar aprotic solvents having a boiling point of at least about 150° C., such that the solution (a) contains on a weight basis from about 5% to about 50% of the polyimide, and (b) does not undergo precipitate formation during spin coating in an atmosphere of up to about 55% relative humidity.

**8 Claims, No Drawings**