

[54] **MODIFIED POLYAMIDE-IMIDE RESINS AND METHOD FOR MAKING THE SAME**

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[21] **Appl. No.:** 289,777

[22] **Filed:** Aug. 3, 1981

[51] **Int. Cl.³** C08G 18/34

[52] **U.S. Cl.** 528/48; 427/388.2; 428/383; 528/53; 528/67; 528/73

[58] **Field of Search** 528/48, 53, 73, 67; 427/388.2; 428/383

[56] **References Cited**

U.S. PATENT DOCUMENTS

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[57] **ABSTRACT**

A modified polyamide-imide resin and method for making the same. The composition comprises the reaction product of an aromatic tricarboxylic acid anhydride reactant, an aromatic diisocyanate reactant and an aliphatic dicarboxylic acid reactant in a solution comprising an aprotic solvent at a temperature ranging from about 70° C. to about 155° C. The tricarboxylic acid anhydride reactant is present in an amount which is greater than about 25 mol percent of the total of the tricarboxylic acid anhydride-aliphatic dicarboxylic acid reactants.

The method comprises the steps of dissolving the aromatic tricarboxylic acid anhydride and aliphatic dicarboxylic acid reactants and an excess of the aromatic diisocyanate reactants in aprotic solvent thereby forming a reaction solution. The aromatic tricarboxylic acid anhydride is present in an amount which is greater than about 25 mol percent of the total of the tricarboxylic acid anhydride-aliphatic dicarboxylic acid reactants. And, reacting the tricarboxylic acid anhydride, dicarboxylic acid and diisocyanate.

28 Claims, 2 Drawing Figures