United States Patent [19]

Disque et al.

[11] **3,884,880**

[45] **May 20, 1975**

[54] **MODIFIED AMIDE-IMIDE RESINS AND METHOD OF MAKING THE SAME**

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[22] Filed: **Sept. 21, 1973**

[21] Appl. No.: **399,393**

[52] **U.S. Cl.**.....**260/77.5 AM;** 260/2.5 AM; 260/18 TN; 260/77.5 AA; 117/128.4

[51] **Int. Cl.**..... **C08q 22/04**

[58] **Field of Search** .....260/77.5 AM, 18 TN, 260/77.5 AA, 2.5 AM; 117/128.4

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Primary Examiner—M. J. Welsh

[57] **ABSTRACT**

A modified completely imidized aromatic polyamide-imide resin which can be applied from conventional phenolic solvents such as cresylic acid, phenols, cresols and the like. The method of the invention includes reacting an aromatic diisocyanate and an aromatic tricarboxylic acid anhydride in an aprotic solvent, modifying the reaction product with an aliphatic dicarboxylic acid, and diluting the same to an appropriate degree with a solvent. Solutions of the resin having relatively low viscosity and a relatively high resin content can also be made by the method of the invention. The modified polyamide-imide resin of the invention has thermal stability and toughness approaching non-modified aromatic polyamide-imide resins and are fully useful as such resins as insulation materials in the electrical industry.

22 Claims, 1 Drawing Figure