

ABSTRACT

A CHEMICAL CURING PROCESS FOR POLYIMIDE PRECURSOR

This disclosure describes a novel method of carrying out chemical curing of a polyimide precursor by employing dehydrating agents, catalysts and other necessary chemical
5 ingredients in the absence of a conventional organic solvent, and in the presence of a solvent in the supercritical state. The resulting material is fully imidized and thermally stable. In addition to being much faster than conventional chemical imidization, this method is economical in terms of consumption of chemicals and is devoid of environmental and pollution problems. Further, it carried out at moderate temperatures,
10 and is thus suitable for composite or guest-host systems containing thermally sensitive guest species in a polymer host matrix.

(Figure 1 is to be published)