

Abstract

A process which enhances the adhesion properties between an organic substrate, such as a solder resist, and an epoxy encapsulant, such as a molding compound, in an integrated circuit package is desirable. The inventive method provides such enhanced adhesion properties by applying graft copolymerization techniques to the fabrication of the integrated circuit package. The method first provides that the surface of the organic substrate is activated by, for example, treating the substrate with ozone. The activated substrate is then grafted with a predetermined monomer, such as glycidyl methacrylate, having an epoxide function group. The encapsulant includes an amine curing agent that, when bonded to the grafted substrate chemically reacts to the epoxide function group on the grafted substrate to form covalent bonds which substantially enhances adhesion.

