



EPOXY-CONTAINING WATERBORNE PHOTOIMAGEABLE COMPOSITION

Abstract of the Disclosure

A waterborne photoimageable composition, developable in alkaline aqueous solution, which is hardenable to form a hard, permanent layer suitable as a solder mask, comprises

- A) between about 25 and about 40 wt% of a latex acrylic binder polymer having an acid number between about 125 and about 200 and a number average molecular weight of between about 20,000 and about 80,000,
 - B) between about 13 and about 30 wt% of a waterborne epoxy resin having an epoxy equivalent weight of between about 100 and about 700,
 - C) between about 20 and about 25 wt% of photopolymerizable, multi-functional α,β -ethylenically unsaturated monomer and/or short-chain oligomer having a molecular weight between about 500 and about 2000,
 - D) between about 4 and about 20 wt% of a free-radical generating chemical system,
 - E) between about 0.5 and about 10 wt% of an epoxy curative and/or cure catalyst, and
 - F) between about 3 and about 12 wt% surfactant(s),
- the weight percentages being based on total weight of A)-F).