

Abstract

NEGATIVE-WORKING ULTRA THICK FILM PHOTORESIST

The present invention relates to a negative working, aqueous base developable, photosensitive photoresist composition comprising: a) a polymer containing the four repeat units of structures (1), (2), (3), and (4), but no other types of repeat units; wherein v, x, y and z, respectively, represent the mole % of each repeat units of structures (1), (2), (3) and (4); b) a radical photo-initiator component, which is comprised of at least one radical photo initiator which is activated by a broad absorption of radiation from about 360 nm to about 440 nm; c) a crosslinker component which is either a mixture consisting of crosslinkers of structure (5), (6) and (7), or a single crosslinker of structure (8); d) a radical inhibitor component; e) an optional surfactant component; f) an optional dissolution promoter component; and g) a solvent. The invention also relates to the process of using this negative resist to produce lithographic images.

