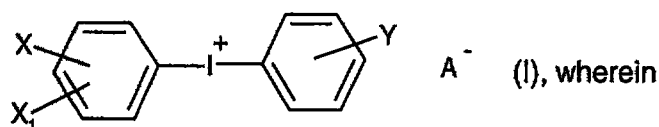


Abstract of the Disclosure

Radiation-sensitive compositions comprising

- (a1) a cationically or acid-catalytically polymerisable or crosslinkable compound or
- (a2) a compound that increases its solubility in a developer under the action of acid; and
- (b) at least one diaryliodonium salt of formula I



X is branched C₃-C₂₀alkyl or C₃-C₈cycloalkyl;

X₁ is hydrogen, linear C₁-C₂₀alkyl, branched C₃-C₂₀alkyl or C₃-C₈cycloalkyl;

with the proviso that the sum of the carbon atoms in X and X₁ is at least 4;

Y is linear C₁-C₁₀alkyl, branched C₃-C₁₀alkyl or C₃-C₈cycloalkyl;

A⁻ is a non-nucleophilic anion, selected from the group (BF₄)⁻, (SbF₆)⁻, (PF₆)⁻, (B(C₆F₅))₄⁻, C₁-C₂₀alkylsulfonate, C₂-C₂₀haloalkylsulfonate, unsubstituted C₆-C₁₀arylsulfonate, camphor-sulfonate, and C₆-C₁₀arylsulfonate substituted by halogen, NO₂, C₁-C₁₂alkyl, C₁-C₁₂halo-alkyl, C₁-C₁₂alkoxy or by COOR₁; and

R₁ is C₁-C₂₀alkyl, phenyl, benzyl; or phenyl mono- or poly-substituted by C₁-C₁₂alkyl, C₁-C₁₂alkoxy or by halogen;

with the proviso that the two phenyl rings on the iodine atom are not identically substituted, have high sensitivity, high storage stability, good solubility and a low tendency to crystallise.