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25. A process for patterning relief structures on a substrate, comprising:

- (a) providing a substrate;
- (b) coating on the substrate a photosensitive composition of claim 24;
- (c) baking the photosensitive composition to provide a photosensitive film on the substrate;
- (d) exposing the photosensitive film to imaging radiation;
- (e) developing the photosensitive film making a portion of the underlying substrate visible; and
- (f) rinsing the substrate.

26. A photoresist composition, comprising:

one or more resin binders that include one or more acid sensitive protecting groups and that are substantially free of phenolic groups protected by acetal or ketal groups and wherein the binder becomes alkali-soluble by the action of an acid to remove the acid sensitive protecting groups;

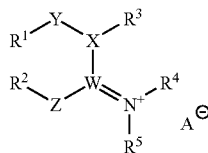
one or more photo acid generators, that, upon exposure to a source of high energy, decompose and generate a photoacid strong enough to remove the one or more acid sensitive groups;

one or more ionic non-photosensitive additives of an iminium salt; and

one or more solvents, wherein the iminium salt is selected from the group consisting of a salt of structure I₀ (B⁺A₀⁻), wherein B⁺ is



wherein R_a and R_b are substituted or unsubstituted alkyl groups that optionally include one or more carbonyl groups, one or more S atoms, one or more O atoms, or one or more NR_e groups within the chain; wherein R_c and R_d are independently selected from the group consisting of hydrogen and an alkyl group, and, if an alkyl group, can optionally include one or more S atoms, one or more O atoms, or one or more NR_e groups; wherein R_a and R_b, or R_a and R_c, or R_c and R_d, or R_b and R_d optionally form a 5-7 membered ring, and wherein R_e is selected from the group consisting of hydrogen and an alkyl group; and A₀⁻ is selected from the group consisting of a sulfamic acid anion, an alkyl sulfate anion, a bis sulfonylimide anion, and a tris sulfonyl methide anion, a salt of the structure:



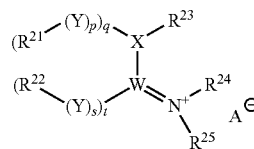
wherein W is a carbon atom, X is selected from the group consisting of a R⁶C group, a nitrogen atom, and oxygen atom and a sulfur atom, Y is selected from the group consisting of a (R⁷)₂C, a carbonyl group, an S atom and an O atom, Z is selected from the group consisting of a (R⁸)₂C group, a R⁹N, an S atom and an O atom, R¹ to R⁹ are each independently selected from the group consisting of a hydrogen atom, C₁-C₃ carbon chain and a 5 to 7 member ring, R¹ and R² may be connected together to

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form a 5-7 member ring, R³ and R⁴ may form a 5-7 member ring if connected together, A⁻ is selected from the group consisting of an organic sulfonic acid anion (R¹¹SO₃⁻), a sulfamic acid anion [R¹²N(R¹³)SO₃⁻], a carboxylic acid anion (R¹⁴CO₂⁻), an alkyl sulfate anion (R¹⁵SO₄⁻), a bis sulfonyl imide anion [(R¹⁶SO₂)₂N⁻], and a tris sulfonyl methide anion [(R¹⁶SO₂)₃C⁻]; where R¹¹, R¹², R¹³, R¹⁴ and R¹⁵ are each independently selected from the group consisting of a C₁-C₂₄ carbon chain, a partially or fully halogen substituted carbon chain, unsubstituted or substituted C₆-C₂₀ aromatic carbon group, and combinations thereof, optionally containing S or N or any organic functional group that may interrupt the skeletal chain;

R¹⁶ is independently selected from the group consisting of highly fluorinated or perfluorinated alkyl and fluorinated aryl groups and may be cyclic, when a combination of any two R¹⁶ groups are linked to form a bridge, further, the R¹⁶ alkyl chains contain from 1-20 carbon atoms and may be straight, branched, or cyclic, such that divalent oxygen, trivalent nitrogen or hexavalent sulfur may interrupt the skeletal chain, and further when R¹⁶ contains a cyclic structure, such structure has 5 or 6 ring members, optionally, 1 or 2 of which are N, S or O atoms,

and a salt of the structure:



wherein W is a carbon atom, X is selected from the group consisting of a R²⁶C group and a nitrogen atom, Y is selected from the group consisting of a (R²⁷)₂C, a carbonyl group, an S atom and an O atom, Z is selected from the group consisting of a (R²⁸)₂C group, a R²⁹N group, an S atom and an O atom, R⁶¹ to R²⁷ and R²⁹ are each independently selected from the group consisting of a hydrogen atom, a phenyl group, and a C₁-C₃ carbon chain optionally substituted with a phenyl group or a 5 to 7 member ring, R²¹ and R²² may be connected together to form a 5-7 member ring, R²³ and R²⁴ may form a 5-7 member ring if connected together, p and s are each independently 0 or 1, and q and t are each independently 1, R²⁸ is selected from the group consisting of a hydrogen atom and a C₁-C₃ carbon chain optionally substituted with a phenyl group or a 5 to 7 member ring; and A⁻ is selected from the group consisting of an organic sulfonic acid anion (R¹¹SO₃⁻), a sulfamic acid anion [R¹²N(R¹³)SO₃⁻], a carboxylic acid anion (R¹⁴CO₂⁻), an alkyl sulfate anion (R¹⁵SO₄⁻), a bis sulfonyl imide anion [(R¹⁶SO₂)₂N⁻], and a tris sulfonyl methide anion [(R¹⁶SO₂)₃C⁻].

27. A process for patterning relief structures on a substrate, comprising:

- (a) providing a substrate;
- (b) coating on the substrate a photosensitive composition of claim 26;
- (c) baking the photosensitive composition to provide a photosensitive film on the substrate;
- (d) exposing the photosensitive film to imaging radiation;
- (e) developing the photosensitive film making a portion of the underlying substrate visible; and
- (f) rinsing the substrate.

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