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said surface from the photoresist of claim 1, exposing a portion of said film to a source of energy that increases the dissolution rate of said polyglutarimide in a developer, and developing the exposed portion of said film with said developer to form said image.

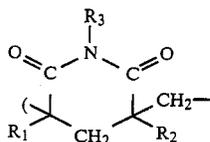
19. The process of claim 18 wherein said film is deposited from said photoresist of claim 2.

20. The process of claim 18 wherein said source of energy is selected from the group consisting of ultraviolet, e-beam, ion beam and x-ray.

21. The process of claim 18 further comprising soft-baking said film prior to exposing said film to said source of energy.

22. A process for forming an image on a surface comprising

depositing an adherent, planarizing film on said surface forming a second surface, said planarizing film comprising a preformed non-crosslinked polyglutarimide polymer formed from an ester of (meth)acrylic acid and having at least five percent by weight glutarimide units of the structure



where R₁, R₂ and R₃ independently represent hydrogen or unsubstituted or substituted alkyl, aryl, aralkyl, or alkaryl hydrocarbons having from one to twenty carbon atoms and where at least 20 mole percent of the R₃ substituents are hydrogen, dissolved in a non-aqueous, spinning solvent,

depositing a second film capable of being imaged on said second surface,

exposing a portion of said second film to a source of radiation,

developing the exposed portion of said second film to create a mask on the planarizing film, and

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transferring said image from said second film through said mask and the planarizing film and onto said surface.

23. The process of claim 22 wherein said second film comprises a positive acting photoresist.

24. The process of claim 22 wherein said image formed on said second film is transferred through said planarizing film onto said surface using reactive ion etching.

25. The process of claim 22 wherein said second film is a negative acting photoresist.

26. The process of claim 23 wherein said planarizing film is exposed to deep UV and developed using an aqueous base developer to transfer said image formed on said second film onto said surface.

27. The process of claim 26 wherein said planarizing film further comprises a photosensitizer sensitive to deep UV.

28. The process of claim 22 further comprising adding at least one layer, intermediate to said planarizing film and said second film, onto said planarizing film, said intermediate layer being resistant to said developing means used to create an image on said second film, and wherein said intermediate layer is developed through said mask formed on said second film to form a second image using plasma or wet etching to form a mask for transferring said second image onto said surface through said planarizing layer.

29. The process of claim 19 wherein said second image on said intermediate layer is transferred onto said surface by dry etching said planarizing layer through said mask formed on said intermediate layer.

30. The spinning solvent of the photoresist of claim 2 comprising a non-solvent for polyglutarimides selected from the group consisting of: acetyl acetone; 1-methoxy-2-propanol; cyclohexanone; chlorobenzene; mixtures of ethylene glycol monoethylether acetate, xylene and butyl acetate; xylene; toluene; butyl acetate; 1,2-dimethoxyethane; and ethylene glycol monomethyl ether, in combination with one or more of the non-spinning solvents or mixtures thereof selected from the group consisting of: amide, polar, aprotic solvents; hydroxylic, polar, protic solvents; polar, aprotic, ketonic solvents; small chain, polar, carboxylic acids; and polar, basic, ethers.

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