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(54) **LITHOGRAPHIC DRY DEVELOPMENT USING OPTICAL ABSORPTION**

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(57) **ABSTRACT**

A novel approach to dry development of exposed photo resist is described in which a photo resist layer is exposed to a visible light source in order to remove the resist in the areas of exposure. The class of compounds used as the resist material, under the influence of the light source, undergoes a chemical/structural change such that the modified material becomes volatile and is thus removed from the resist surface. The exposure process is carried out for a time sufficient to ablate the exposed resist layer down to the layer below. A group of compounds found to be useful in this process includes aromatic calixarenes.