Simulation of three dimensional positive photoresist images

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ABSTRACT

The least action dissolution algorithm (LEAD) is applied to simulate three dimensional positive photoresist images on reflective algorithm and its modifications by utilizing the local validity of describe developer penetration with a moving boundary. The electric field and the concentration of the photactive compound (PAC) within the photoresist film in the presence of standing waves in three dimensions are obtained from the numerically efficient WKB procedure proposed recently. The APC concentration profile is combined with the LEAD algorithm to simulate a three dimensional one micron diameter contact hole in a single layer resist.