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(71) Applicant: APPLIED MATERIALS, INC. [US/US]; P.O. Box 450A, Santa Clara, CA 95052 (US).

(72) Inventors: HSIEH, Chang, Lin; 1071 Regency Knoll Drive, San Jose, CA 95129 (US). CHEN, Hui; 1533 Prosperity Court, San Jose, CA 95131 (US). YUAN, Jie; 1533 Prosperity Court, San Jose, CA 95131 (US). YE, Yan; 13271 Via Arriba Drive, Saratoga, CA 95070 (US).

(74) Agents: BERNADICOU, Michael, A. et al.; Blakely, Sokoloff, Taylor & Zafman LLP, 17th floor, 12400 Wilshire Boulevard, Los Angeles, CA 90025 (US).

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(54) Title: NH_3 PLASMA DESCUMMING AND RESIST STRIPPING IN SEMICONDUCTOR APPLICATIONS

(57) Abstract: In general, the present disclosure pertains to a method for removing photoresist from locations on a semiconductor structure where its presence is undesired. In one embodiment, a method is disclosed for descumming residual photoresist material from areas where it is not desired after patterning of the photoresist. In another embodiment, a misaligned patterned photoresist is stripped from a semiconductor susbtrate surface. In particular, the method comprises exposing the semiconductor structure to a plasma generated from a source gas comprising NH_3. A substrate voltage is utilized in both methods in order to produce anisotropic etching. In the descumming embodiment, the critical dimensions of the patterned photoresist are maintained. In the photoresist stripping embodiment, a patterned photoresist is removed without adversely affecting a partially exposed underlaying layer of an organic dielectric.