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(71) Applicant *(for all designated States except US)*: **APPLIED MATERIALS, INC.** [US/US]; 3050 Bowers Avenue, Santa Clara, CA 95054 (US).

(72) Inventors; and
(75) Inventors/Applicants *(for US only)*: **LI, Jiping** [US/US]; 3510 Middlefield Rd., Palo Alto, California 94306 (US). **HUNTER, Aaron Muir** [US/US]; 430 Emeline Avenue, Santa Cruz, California 95060 (US). **ADAMS, Bruce E.** [US/US]; 3411 Southwest 13th, Portland, Oregon 97239 (US). **MOFFITT, Theodore** [US/US]; 5558 SE Pine St., Hillsboro, Oregon 97123 (US). **MOFFATT, Stephen** [GB/GB]; Seafield Coach House, Milbrook, JERSEY, St. Lawrence, JE3 1LL (GB).

(74) Agents: **PATTERSON, B. Todd** et al.; Patterson & Sheridan, L.L.P., 3040 Post Oak Blvd., Suite 1500, Houston, Texas 77056-6582 (US).

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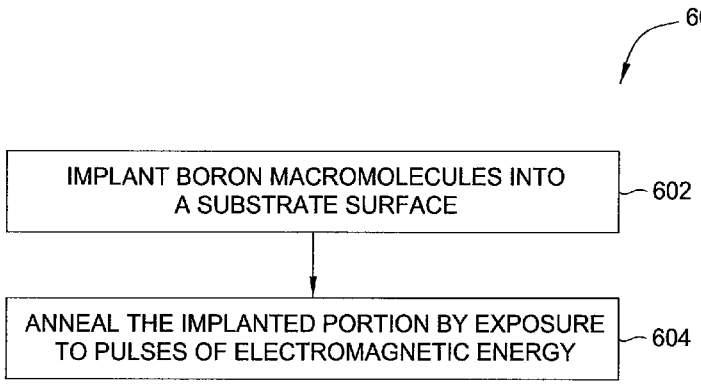


FIG. 6

(57) Abstract: A method and apparatus for implanting a semiconductor substrate with boron clusters. A substrate is implanted with octadecaborane by plasma immersion or ion beam implantation. The substrate surface is then annealed to completely dissociate and activate the boron clusters. The annealing may take place by melting the implanted regions or by a sub-melt annealing process.

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