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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, Ming** [CN/US]; 20800 Homestead Rd., Apt. 39b, Cupertino, CA 95014 (US). **CUNNINGHAM, Kevin** [US/US]; 671a Channing Avenue, Palo Alto, CA 94301 (US). **PANAYIL, Sheeba** [US/US]; 2226 Schott Court, Santa Clara, CA 95054 (US). **XING, Guangcai** [CN/US]; 117 Esparito Avenue, Fremont, CA 94539 (US). **IYER, R. Suryanarayanan** [US/US]; 2288 Lenox Place, Santa Clara, CA 95054 (US).

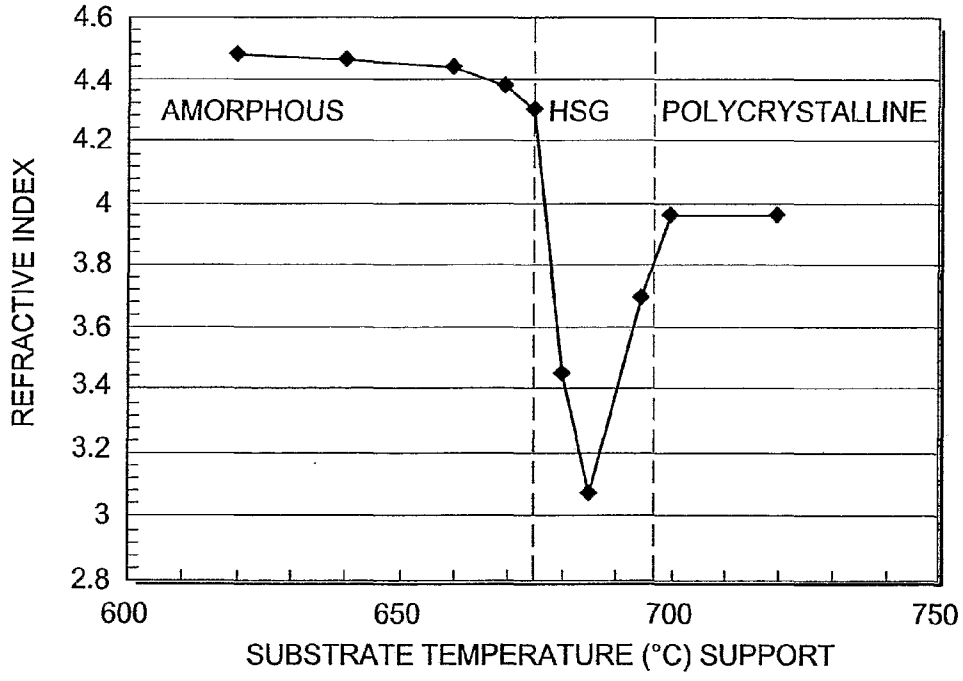
(74) Agents: **PATTERSON, B. Todd** et al.; PATTERSON & SHERIDAN, L.L.P., 3040 Post Oak Blvd., Suite 1500, Houston, Texas 77056-6582 (US).

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(54) Title: SINGLE WAFER THERMAL CVD PROCESSES FOR HEMISPHERICAL GRAINED SILICON AND NANO-CRYSTALLINE GRAIN-SIZED POLYSILICON



(57) Abstract: Methods for depositing hemispherical grained silicon layers and nanocrystalline grain-sized polysilicon layers are provided. The hemispherical grained silicon layers and nanocrystalline grain-sized polysilicon layers are deposited in single substrate chemical vapor deposition chambers. The hemispherical grained silicon layers and nanocrystalline grain-sized polysilicon layers may be used as electrode layers in semiconductor devices. In one aspect, a two step deposition process is provided to form a nanocrystalline grain-sized polysilicon layer with a reduced roughness.

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