

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
13 September 2007 (13.09.2007)

PCT

(10) International Publication Number
WO 2007/103598 A3

- (51) International Patent Classification:
C23C 16/42 (2006.01) H01L 31/0288 (2006.01)
- (21) International Application Number:
PCT/US2007/061267
- (22) International Filing Date: 30 January 2007 (30.01.2007)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
11/345,244 31 January 2006 (31.01.2006) US
- (71) Applicant (for all designated States except US): APPLIED MATERIALS, INC. [US/US]; 3050 Bowers Avenue, Santa Clara, California 95054 (US).

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

- (72) Inventors; and
- (75) Inventors/Applicants (for US only): BACHRACH, Robert, Z. [US/US]; 233 Chapin Lane, Burlingame, California 94010 (US). WON, Tae, Kyung [KR/US]; 1054 Belvedere Lane, San Jose, California 95129 (US).
- (74) Agents: PATTERSON, B., Todd et al.; Patterson & Sheridan LLP, 3040 Post Oak Blvd., Suite 1500, Houston, Texas 77056 (US).

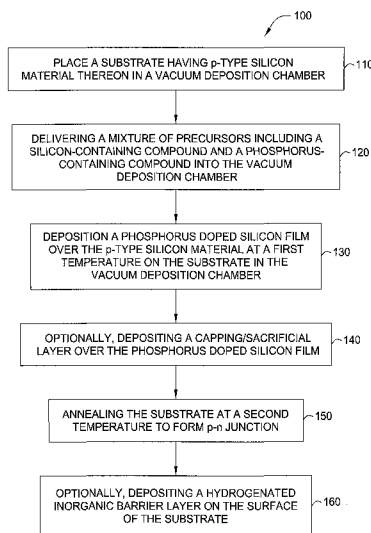
Published:
— with international search report
— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

(88) Date of publication of the international search report:
6 December 2007

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: SILICON PHOTOVOLTAIC CELL JUNCTION FORMED FROM THIN FILM DOPING SOURCE



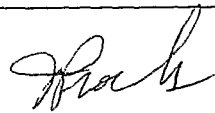
(57) Abstract: A method and apparatus for fabricating a solar cell and forming a p-n junction is disclosed. Solar cell p-n junction is formed by depositing a thin film of n-type phosphorus doped silicon material on a sheet from a mixture of precursors and annealing the sheet to obtain the p-n junction at a desired depth. In one embodiment, a plasma enhanced chemical vapor deposition chambers is used to deposit a phosphorus doped amorphous silicon film on a sheet surface by using precursors including a silicon-containing gas, a hydrogen-containing precursor, and a phosphorus-containing gas. In another embodiment, annealing furnace and/or rapid thermal processing chambers are used to anneal the sheet having the phosphorus doped amorphous silicon film deposited thereon.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 07/61267

A. CLASSIFICATION OF SUBJECT MATTER IPC(8) - C23 C 16/42; H01L 31/0288 (2007.01) USPC - 427/255.17; 257/607; 118/715 According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) 427/255.17; 257/607; 118/715 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched USPC 427/255.17; 257/607; 118/715 and all relevant classifications (text search, see terms below) Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) PubWEST(USPT,PGPB,EPAB,JPAB); DialogPRO(Engineering); Google Scholar Search Terms: photovoltaic/solar, p-type, silicon, hydrogen, silane, phosphorus doped, annealing, plasma, precursor, p-n		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X ----- Y	US 2004/0259335 A1 (Narayanan et al.) 23 December 2004 (23.12.2004), entire document especially para [0017], [0024], [0030], [0032], [0024]-[0028] and [0040]	1, 3, 5-6, 9-16 and 19-21 2, 4, 7-8 and 17-18
Y	US 2005/0062041 A1 (Terakawa et al.) 24 March 2005 (24.03.2005), para [0089]-[0090] and [0092]	2 and 4
Y	US 2004/0231590 A1 (Ovshinsky) 25 November 2004 (25.11.2004), Abstract and para [0013]	7-8 and 17-18
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Date of the actual completion of the international search 18 September 2007 (18.09.2007)		Date of mailing of the international search report 10 OCT 2007
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