PCT WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 7 : H01L 21/02, 21/66 | A1

(11) International Publication Number: **WO 00/07226**

(43) International Publication Date: 10 February 2000 (10.02.00)

(21) International Application Number: PCT/US99/17247

(22) International Filing Date: 29 July 1999 (29.07.99)

(30) Priority Data:
09/126,552 30 July 1998 (30.07.98) US

(71) Applicant: APPLIED MATERIALS, INC. [US/US]; 3050 Bowers Avenue, Santa Clara, CA 95054 (US).

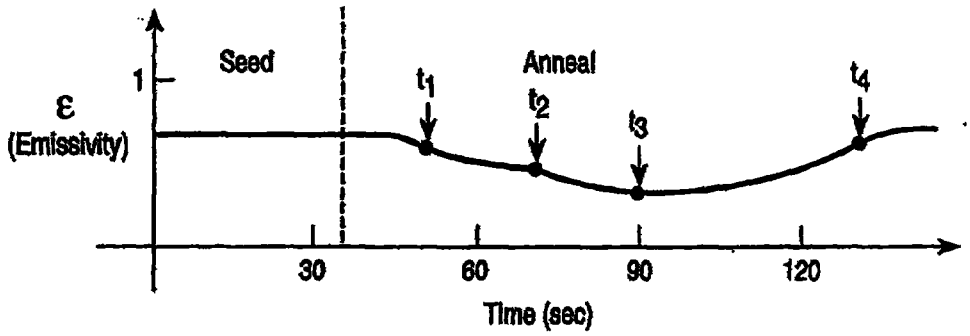
(72) Inventors: REDINBO, Gregory, F.; 1904 Harris Avenue, San Jose, CA 95124 (US). RAVI, Jallepally; 3707 Poinciana Drive #50, Santa Clara, CA 95051 (US). RIVKIN, Michael; 1134 Andover Drive, Sunnyvale, CA 94087 (US).

(74) Agents: BERNADICOU, Michael, A. et al.; Blakely, Sokoloff, Taylor & Zafman LLP, 7th floor, 12400 Wilshire Boulevard, Los Angeles, CA 90025 (US).

(81) Designated States: JP, KR, SG, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).

Published
With international search report.

(54) Title: METHOD AND APPARATUS FOR ENDPOINT DETECTING THE FORMATION OF AN HSG POLYSILICON LAYER



(57) Abstract

The present invention describes a method of end point detecting a process. According to the present invention a surface characteristic is continually measured while the substrate is being processed. A predetermined change in the surface characteristic is utilized and a signal end the processing step.