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(21) International Application Number: PCT/US98/23565 (22) International Filing Date: 3 November 1998 (03.11.98) (30) Priority Data: 08/965,939 7 November 1997 (07.11.97) US (71) Applicant (for all designated States except US): APPLIED KOMATSU TECHNOLOGY, INC. [JP/JP]; No. 1, 7 ban 2-chome, Nishishinjuku, Tokyo (JP). (71)(72) Applicant and Inventor: LAW, Kam, S. [US/US]; 461 Riveria Drive, Union City, CA 94587 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): SHANG, Quanyuan [CN/US]; 1507 Johnson Avenue, San Jose, CA 95129 (US). ROBERTSON, Robert, McCormick [US/US]; 900 Pepper Tree Lane #1422, Santa Clara, CA 95051 (US). TAKEHARA, Takako [JP/US]; 2811 Colony View Place, Hayward, CA 94541 (US). WON, Taekyung [KR/US]; 900 Pepper Tree Lane #1113, Santa Clara, CA 95051 (US). SUN, Sheng [CN/US]; 1971 Via Reggio Court, San Jose, CA 95132 (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, US, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>
(54) Title: METHOD FOR ANNEALING AN AMORPHOUS FILM USING MICROWAVE ENERGY (57) Abstract A system and method for annealing a film on a substrate in a processing chamber, including a microwave generator (173) disposed to provide microwaves to an area within the interior of the chamber (133). The microwaves have a frequency such that the film is substantially absorptive at the frequency but the substrate is not substantially absorptive at the frequency. A waveguide (175) distributes the microwaves over the surface of the film to provide a substantially uniform dosage of microwaves over the surface of the film. The method includes depositing a film on a substrate in the processing chamber. During at least a portion of the time of the depositing step, microwaves are generated having a frequency such that the film has an absorption peak at the frequency but the substrate lacks a substantial absorption peak at the frequency. The microwaves are directed towards the film.		