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- (71) Applicants (for all designated States except US): **AVIZA TECHNOLOGY, INC.** [US/US]; 440 Kings Village Road, Scotts Valley, CA 95066 (US). **INTEGRATED PROCESS SYSTEMS, LTD.** [KR/KR]; 33 Jije-dong, Pyunglaek, Kyungki-do (KR).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **LEE, Sang-In** [KR/US]; 22608 San Juan Road, Cupertino, CA 95014 (US). **SENZAKI, Yoshihide** [JP/US]; 400 Clubhouse Drive, Aptos, CA 95003 (US). **LEE, Sang-Kyoo** [KR/KR]; #201, 17-22 Yangjae 1 Dong, Suhcho-Gu, Seoul (KR).
- (74) Agents: **SWIATEK, Maria, S.** et al.; Dorsey & Whitney LLP, 4 Embarcadero Center, Suite 3400, San Francisco, CA 94111 (US).
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(54) Title: ATOMIC LAYER DEPOSITION OF HIGH K METAL SILICATES

(57) Abstract: The present invention relates to the atomic layer deposition ("ALD") of high k dielectric layers of metal silicates, including hafnium silicate. More particularly, the present invention relates to the ALD formation of metal silicates using metal organic precursors, silicon organic precursors and ozone. Preferably, the metal organic precursor is a metal alkyl amide and the silicon organic precursor is a silicon alkyl amide.

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B. FIELDS SEARCHED		
Minimum documentation searched (classification system followed by classification symbols) U.S. : 438/681, 758, 785		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched NONE		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) USPAT WEST		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y,P	US 6,465,371 B2 (LIM) 15 October 2002 (15.10.2002), column 3, lines 55-65.	1-25
Y	US 6,203,613 B1 (GATES et al) 20 March 2001 (20.03.2001), column 8, lines 10-60.	1-25
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