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NOTICE OF ALLOWANCE AND FEE(S) DUE

23483 7590 10/10/2012
WILMERHALE/BOSTON
60 STATE STREET
BOSTON, MA 02109

EXAMINER

CHEN, BRET P

ART UNIT

PAPER NUMBER

1715

DATE MAILED: 10/10/2012

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/407,556	03/19/2009	Roy G. Gordon	42697.135-US7	7572

TITLE OF INVENTION: VAPOR DEPOSITION OF METAL OXIDES, SILICATES AND PHOSPHATES, AND SILICON DIOXIDE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$885	\$300	\$0	\$1185	01/10/2013

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

**Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885**

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

23483 7590 10/10/2012
WILMERHALE/BOSTON
60 STATE STREET
BOSTON, MA 02109

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/407,556	03/19/2009	Roy G. Gordon	42697.135-US7	7572

TITLE OF INVENTION: VAPOR DEPOSITION OF METAL OXIDES, SILICATES AND PHOSPHATES, AND SILICON DIOXIDE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$885	\$300	\$0	\$1185	01/10/2013

EXAMINER	ART UNIT	CLASS-SUBCLASS
CHEN, BRET P	1715	427-255310

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 _____
- (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 _____
- 3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): (**Please first reapply any previously paid issue fee shown above**)

- ☐ A check is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____

Date _____

Typed or printed name _____

Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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12/407,556	03/19/2009	Roy G. Gordon	42697.135-US7	7572
23483	7590	10/10/2012	EXAMINER	
WILMERHALE/BOSTON			CHEN, BRET P	
60 STATE STREET			ART UNIT	
BOSTON, MA 02109			PAPER NUMBER	
			1715	
DATE MAILED: 10/10/2012				

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 521 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 521 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Notice of Allowability	Application No.	Applicant(s)	
	12/407,556	GORDON ET AL.	
	Examiner	Art Unit	
	BRET CHEN	1715	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 9/6/12.
2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
3. ☒ The allowed claim(s) is/are 1-10.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

<ol style="list-style-type: none"> 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date <u>9/6/12, 3/15/12</u> 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material 	<ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application 6. <input type="checkbox"/> Interview Summary (PTO-413), Paper No./Mail Date ____. 7. <input type="checkbox"/> Examiner's Amendment/Comment 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other ____.
--	--

/Bret Chen/ Primary Examiner, Art Unit 1715	
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REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance:

It is well known to form a metal oxide by ALD as noted by Aarik et al. (Thin Solid Films article). With respect to the precursor, it is well known to utilize metal alkylamide to form an oxide film by CVD as noted in Vaarstra (6,159,855). Furthermore, it is well known to utilize metal alkylamide to form a titanium-silicon-nitride film by ALD (Applied Physics Letters article). However, the prior art references fail to teach or suggest using alkylamide to form a metal oxide film by ALD.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRET CHEN whose telephone number is (571)272-1417. The examiner can normally be reached on 7:30am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Bret Chen/
Primary Examiner, Art Unit 1715
9/26/12

Notice of References Cited	Application/Control No. 12/407,556		Applicant(s)/Patent Under Reexamination GORDON ET AL.	
	Examiner BRET CHEN		Art Unit 1715	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2006/0258078	11-2006	Lee et al.	438/216
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	Min, Jae-Sik, et al., "Metal-organic atomic-layer deposition of titanium-silicon-nitride films". Applied Physics Letters, Volume 75, Number 11, 13 September 1999, pp.1521-1523.
	V	Hausmann, Dennis M., et al., "Atomic Layer Deposition of Hafnium and Zirconium Oxides Using Metal Amide Precursors". Chem. Mater. Vol.14, No.10, 2002, 4350-4358.
	W	Leskela, Markku, et al., "Review: Atomic layer deposition (ALD): from precursors to thin film structures." Thin Solid Films 409 (2002), pp.138-146.
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

12407556 - GAU: 1715

Approved for use through 07/31/2012. CMB 9883-0031

U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

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Substitute for form 1449(PTO)				<div>Complete if Known</div> <div>Application Number 12/407,556-Conf. #7572</div> <div>Filing Date March 19, 2009</div> <div>First Named Inventor Roy G. GORDON</div> <div>Art Unit 1715</div> <div>Examiner Name B. P. Chen</div> <div>Attorney Docket Number 0042697.00135US7 (HU 1824)</div>	
<div>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</div> <div>(Use as many sheets as necessary)</div>					
Sheet	1	of	2		

[illegible][illegible]

Examiner Signature	/Bret Chen/	Date Considered	09/25/2012
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EXAMINER: initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. * CITE NO. Those applications/citations which are marked with an single asterisk (*) next to the Cite No. are not supplied under 37 CFR 1.98(a)(2)(ii) because that application was filed after June 30, 2010 or is available in the IFW. Applicants: unique citation designation number (optional). * (See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 201.05.) * Enter Office that issued the document, by the two-letter code (WFO/PC Standard 37.13). * For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. * Kind of document by the appropriate symbols as indicated on the document under WFO/PC Standard 37.16 if possible. * Applicant is to place a check mark here if English language Translation is attached.

ACTIVEUS 100827408v2

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /B.C./

Receipt date: 09/06/2012

12407556 - GAU: 1715

PTO/SB/086 (07-09)
Approved for use through 07/31/2012 OMB 0581-0031
U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

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Substitute for form 1449/PTO <div style="text-align: center;">INFORMATION DISCLOSURE STATEMENT BY APPLICANT</div> <div style="text-align: center;"><i>(Use as many sheets as necessary)</i></div>		<div style="text-align: center;">Complete if Known</div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Application Number</td> <td>12/407,556-Conf. #7572</td> </tr> <tr> <td>Filing Date</td> <td>March 19, 2009</td> </tr> <tr> <td>First Named Inventor</td> <td>Roy G. GORDON</td> </tr> <tr> <td>An Unit</td> <td>1715</td> </tr> <tr> <td>Examiner Name</td> <td>B. P. Chen</td> </tr> <tr> <td>Attorney Docket Number</td> <td>0042697.00135US7 (HU 1824)</td> </tr> </table>		Application Number	12/407,556-Conf. #7572	Filing Date	March 19, 2009	First Named Inventor	Roy G. GORDON	An Unit	1715	Examiner Name	B. P. Chen	Attorney Docket Number	0042697.00135US7 (HU 1824)
Application Number	12/407,556-Conf. #7572														
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First Named Inventor	Roy G. GORDON														
An Unit	1715														
Examiner Name	B. P. Chen														
Attorney Docket Number	0042697.00135US7 (HU 1824)														
Sheet	2	of	2												

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	CA	Chiu, "Chemical Vapor Deposition 803," Kirk-Othmer Encyclopedia of Chemical Technology, Vol. 5, July 2004, pp. 803-813	
	CB	Choy, "Chemical Vapour Deposition of Coatings," Progress in Materials Science, 48, 2003, pp. 57-170	
	CC	Condorelli et al., "Engineering of Molecular Architectures of β -diketonate Precursors Toward New Advanced Materials," Science Direct, Coordination Chemistry Reviews, 251, 2007, pp. 1931-1950	
	CD	McElwee-White, "Design of Precursors for the CVD of Inorganic Thin Films," Dalton Trans., 2006, pp. 5327-5339	


Examiner Signature	/Bret Chen/	Date Considered	09/25/2012
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¹EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

²Applicant's unique citation designation number (optional). ³Applicant is to place a check mark here if English language Translation is attached.

ACTIVEUS 100627408v2

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /B.C./


Search Notes 	Application/Control No. 12407556	Applicant(s)/Patent Under Reexamination GORDON ET AL.
	Examiner BRET CHEN	Art Unit 1715

SEARCHED			
Class	Subclass	Date	Examiner
427	255.31, 255.36	3/15/2012	bc
117	84, 88	3/15/2012	bc
updated	previous	9/25/2012	bc

SEARCH NOTES		
Search Notes	Date	Examiner
east, google, inventor	3/15/2012	bc
referred to related applications 11/199032, 10/381628	3/15/2012	bc
east, google	9/25/2012	bc

INTERFERENCE SEARCH			
Class	Subclass	Date	Examiner
427	255.31, 255.36	9/25/2012	bc
117	84, 88	9/25/2012	bc

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<i>Index of Claims</i> 	Application/Control No. 12407556	Applicant(s)/Patent Under Reexamination GORDON ET AL.
	Examiner BRET CHEN	Art Unit 1715


✓	Rejected
=	Allowed

-	Cancelled
÷	Restricted

N	Non-Elected
I	Interference

A	Appeal
O	Objected

<input checked="" type="checkbox"/> Claims renumbered in the same order as presented by applicant					<input type="checkbox"/> CPA		<input type="checkbox"/> T.D.		<input type="checkbox"/> R.1.47	
CLAIM		DATE								
Final	Original	01/06/2012	03/15/2012	09/25/2012						
	1	÷	✓	=						
	2	÷	✓	=						
	3	÷	✓	=						
	4	÷	✓	=						
	5	÷	✓	=						
	6	÷	✓	=						
	7	÷	✓	=						
	8	÷	✓	=						
	9	÷	✓	=						
	10	÷	✓	=						
	11	÷	-	-						
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Issue Classification 	Application/Control No. 12407556	Applicant(s)/Patent Under Reexamination GORDON ET AL.
	Examiner BRET CHEN	Art Unit 1715

ORIGINAL						INTERNATIONAL CLASSIFICATION												
CLASS		SUBCLASS				CLAIMED					NON-CLAIMED							
427		255.31				C	2	3	C	16 / 40 (2006.01.01)								
CROSS REFERENCE(S)																		
CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)																	
427	255.36																	
117	84	88																

<input checked="" type="checkbox"/> Claims renumbered in the same order as presented by applicant <input type="checkbox"/> CPA <input type="checkbox"/> T.D. <input type="checkbox"/> R.1.47															
Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original

NONE		Total Claims Allowed:	
		10	
(Assistant Examiner)	(Date)		
/BRET CHEN/	9/26/12	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	none

Receipt date: 03/15/2012

12407556 - GAU: 1715

PTO/SBG/61a (07-09)

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Substitute for form 1449/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Application Number	12/407,556-Conf. #7572
		Filing Date	March 19, 2009
		First Named Inventor	Roy G. GORDON
		Art Unit	1715
		Examiner Name	B. P. Chen
Sheet	1	of	10
		Attorney Docket Number	0042697.00135US7

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	AA*	US-2001/0054769	12-27-2001	Raaijmakers et al.	
	AB*	US-2002/0004281-A1	01-10-2002	Lee et al.	
	AC*	US-2002/0018649-A1	02-14-2002	George et al.	
	AD*	US-2002/0102614-A1	08-01-2002	Olsen	
	AE*	US-2003/0015764-A1	01-23-2003	Raaijmakers et al.	
	AF*	US-2003/0129087	07-10-2003	Barbee et al.	
	AG*	US-2004/0018694-A1	01-29-2002	Lee et al.	
	AH*	US-2005/0086358	03-24-2005	Itsuki et al.	
	AI*	US-2006/0046426	03-02-2006	Sandhu et al.	
	AJ*	US-2006/0046518	03-02-2006	Hill et al.	
	AK*	US-2006/0062910	03-23-2006	Meiere	
	AL*	US-2006/0110936	05-25-2006	Hill et al.	
	AM*	US-2006/0246719	11-02-2006	Rueger et al.	
	AN*	US-2007/0180761	07-12-2007	Reuter et al.	
	AO*	US-4,388,117	05-31-1983	Gordon	
	AP*	US-4,474,642	10-02-1984	Nakane et al.	
	AQ*	US-4,512,862	04-23-1985	Rigby	
	AR*	US-4,723,978	02-09-1988	Clodgo et al.	
	AS*	US-4,792,463	12-20-1988	Okada et al.	

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Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ³
		Country Code ² Number ² Kind Code ² (if known)	MM-DD-YYYY			
	BA**	DE-43 16 883-A	11-24-1994	Denk, Michael Dr.		✓
	BB**	EP-0 560 617-A	09-15-1993	Kawasaki Steel Co.		
	BC**	EP-1067595-A2	01-10-2001	Air Products and Chemicals Inc.		
	BD**	JP-04359515	12-11-1992	NEC Corp		✓
	BE	JP-06140390-A	05-20-1994	Kawasaki Steel Corp.		✓
	BF	JP-07153696-A	06-15-1995	Canon Sales Co., Inc.		✓

Examiner Signature	/Bret Chen/	Date Considered	09/25/2012
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12407556 - GAU: 1715

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Application Number	12/407,556-Conf. #7572
		Filing Date	March 19, 2009
		First Named Inventor	Roy G. GORDON
		Art Unit	1715
		Examiner Name	B. P. Chen
Sheet	2	of	10
		Attorney Docket Number	0042697.00135US7

U.S. PATENT DOCUMENTS					
Examiner Initials ¹	Cite No. ²	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number/Kind Code ³ (if known)			
	AT*	US-5,064,686	11-12-1991	McGeary	
	AU*	US-5,389,401	02-14-1995	Gordon	
	AV*	US-5,403,630	04-04-1995	Matsui et al.	
	AW*	US-5,710,875	01-20-1998	Tsang	
	AX*	US-5,922,787	07-13-1999	Kondo et al.	
	AY*	US-6,090,442	07-18-2000	Klaus et al.	
	AZ*	US-6,203,613	03-20-2001	Gates et al.	
	AA1*	US-6,258,707	07-10-2001	Uzoh	
	AB1*	US-6,335,288	01-01-2002	Kwan et al.	
	AC1*	US-6,339,004	01-15-2002	Kim	
	AD1*	US-6,342,432	01-29-2002	Wang	
	AE1*	US-6,395,209-A1	05-28-2002	Yoshida et al.	
	AF1*	US-6,482,733	11-19-2002	Raaijmakers et al.	
	AG1*	US-6,534,395-A1	03-18-2003	Werkhoven et al.	
	AH1*	US-6,867,152	03-15-2005	Hausmann et al.	
	AI1*	US-6,949,269	09-27-2005	Seidl et al.	
	AJ1*	US-6,969,539-A1	11-29-2005	Gordon et al.	
	AK1*	US-7,064,227	06-20-2006	Lei et al.	
	AL1*	US-7,097,878	06-29-2006	Rulkens et al.	

FOREIGN PATENT DOCUMENTS					
Examiner Initials ¹	Cite No. ²	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Country Code ³ - Number/Kind Code ³ (if known)			
	BG	JP-2001-074931-A	03-23-2001	Nippon Kogaku KK	✓
	BH**	JP-2002-093803-A2	03-29-2002	Machida et al.	✓
	BI**	JP-2002-093804-A2	03-29-2002	Tri Chemical Laboratory Inc.	✓
	BJ	JP-3177560-A	08-01-1991	Nippon Steel Corp; Matsushita Electric Ind Co Ltd	✓
	BK**	JP-3409290	05-26-2003	Tri Chemical Laboratories, Inc.	✓
	BL**	KF-10-2005-0039421	04-29-2005	Samsung Electronics Co., Ltd.	✓

Examiner Signature	/Bret Chen/	Date Considered	09/25/2012
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Substitute for form 1449/PTO				<div>Complete if Known</div> <div>Application Number 12/407,556-Conf. #7572</div> <div>Filing Date March 19, 2009</div> <div>First Named Inventor Roy G. GORDON</div> <div>Art Unit 1715</div> <div>Examiner Name B. P. Chen</div>	
<div>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</div> <div>(Use as many sheets as necessary)</div>				<div>Attorney Docket Number 0042697.00135US7</div>	
Sheet	3	of	10		

[illegible]

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. ²	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear
		Country Code ¹ Number ³ Kind Code ⁴ (if known)	MM-DD-YYYY		
	BM**	KR-156980-A2	07-27-1998	Hyun Joo Shin	
	BN**	WO-00/16377-A2	03-23-2000	Gentech Co., Ltd.	
	BO**	WO-01/27347	04-19-2001	ASM Microchemistry OY	
	BP**	WO-01/45158-A1	06-21-2001	Genus, Inc.	
	BQ**	WO-02/27063-A2	04-04-2002	President and Fellows of Harvard College	
	BR	WO-2003/089167	10-09-2003	President and Fellows of Harvard College	

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Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	12/497,556-Conf. #7572
				Filing Date	March 19, 2009
				First Named Inventor	Roy G. GORDON
				Art Unit	1715
				Examiner Name	B. P. Chen
Sheet	4	of	10	Attorney Docket Number	0042697.00135US7

[illegible]

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear
		Country Code ² , Number ³ , Kind Code ⁴ (if known)	MM-DD-YYYY		
	BS**	WO-91/08322-A1	06-13-1991	President and Fellows of Harvard College	
	BT**	WO-97/38355	10-16-1997	Miorion Corp.	
	BU**	WO-98/15669-A	04-16-1998	Felts, John T.	
	BY**	WO-99/29924-A	06-17-1999	Nesta OYJ et al.	
	BW**	WO-99/29926-A	06-17-1999	Siemens AG; Advanced Tech Materials	

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Substitute for form 1449/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Application Number	12/407,556-Conf. #7572
		Filing Date	March 19, 2009
		First Named Inventor	Roy G. GORDON
		An Unit	1715
		Examiner Name	B. P. Chen
		Attorney Docket Number	0042697.00135US7
Sheet	5	of	10

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	CA**	"Table 36 DRAM Trench Capacitor Films Technology Requirements." (2000), 1 Page.	
	CB**	Backer et al., "Esters Mixtes De L'Acide Tetrathio Orthosilicique", <i>Rev. Trav. Chim.</i> , Vol. 61, pp. 500-512, 1942	
	CC	Becker, et al., "Diffusion Barrier Properties of Tungsten Nitride Films Grown by Atomic Layer Deposition from bis(tert-butylimido)bis(dimethylamido)tungsten and ammonia," <i>Applied Physics Letters</i> , Vol. 82, No. 14, April 2003, pp. 2239-2241	
	CD**	Bergstrom et al. "Molecular Descriptors Influencing Melting Point and Their Role in Classification of Solid Drugs" <i>J. Chem. Inf. Comput. Sci.</i> 2003, 43, 1177-1185	
	CE**	Bradley et al., "Metallo-organic Compounds Containing Metal-Nitrogen Bonds. Part VI Infrared and Nuclear Magnetic Resonance of Dialkylamido-derivatives of Titanium, Vanadium, Zirconium Niobium, Hafnium, Tantalum, and Thorium", <i>J. Chem. Soc., A</i> , pp. 980-984, 1969	
	CF	Bradley, et al., "Metallo-organic Compounds containing Metal-Nitrogen bonds. Part I. Some Dialkylamino-derivatives of Titanium and Zirconium," <i>J. Amer. Chem. Soc.</i> , 1955, 77, pp. 3857-3861	
	CG**	Chang, J.P. and LIN, Y.S. "Thermal stability of stacked high-k dielectrics on silicon" <i>Applied Physics Letters</i> , Vol. 79, No. 23, 3 December 2001 (3824-3826)	
	CH**	Coltrin, M. et al., "Chemical kinetics in chemical vapor deposition: growth of silicon dioxide from tetraethoxysilane (TEOS)", <i>Thin Solid Films</i> , Elsevier-Sequoia S.A., Lausanne, Ch, Vol. 365, No. 2, pp. 251-263, XP004197205, ISSN: 0040-6090, April 2000	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Application Number	12/407,556-Conf. #7572		
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		First Named Inventor	Roy G. GORDON		
		An Unit	1715		
		Examiner Name	B. P. Chen		
Sheet	6	of	10	Attorney Docket Number	0042697.00135US7

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	CI	European Search Report issued for European Patent Application No. EP 06026277, dated February 27, 2007, 2 pages	
	CJ**	Ferguson et al., "Atomic Layer Deposition of Al ₂ O ₃ and SiO ₂ on BN Particles using Sequential Surface Reactions", <i>Applied Surface Science</i> , Vols. 162-163, pp. 280-292, 2000	
	CK**	Ferguson et al., "Atomic Layer Deposition of SiO ₂ Films on BN Particles using Sequential Surface Reactions", <i>Chem. Mater.</i> , Vol. 12, pp. 3472-3480, 2000	
	CL**	Fix, R. et al., "Chemical Vapor Deposition of Titanium, Zirconium, and Hafnium Nitride Thin Films," <i>Chemistry of Materials</i> 3(1991) Nov./Dec., No. 6, Washington, DC, U.S., pp. 1138-1148	
	CM**	Furumura, Y., Abstract for "High-K dielectrics for DRAM applications" (1996), 1 Page.	
	CN**	Gasser et al., "Quasi-Monolayer Deposition of Silicon Dioxide", <i>Thin Solid Films</i> , Vol. 250, pp. 213-218, 1994	
	CO**	George et al., "Atomic Layer Controlled Deposition of SiO ₂ and Al ₂ O ₃ Using ABAB... binary reaction sequence chemistry", <i>Appl. Surf. Sci.</i> , 82/83, pp. 460-467, 1994	
	CP	Gordon et al., "Vapor Deposition of Metal Oxides and Silicates: Possible Gate Insulators for Future Microelectronics," <i>Chem. Mater.</i> , 2001, 13, pp. 2463-2464	
	CQ	Haukka, et al., "Chemisorption of chromium acetylacetonate on porous high surface area silica," <i>Applied Surface Science</i> 75, 1994, 220-227, 8 pages	

Examiner Signature	/Bret Chen/	Date Considered	09/25/2012
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¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

ACTIVEUS 00000200v1

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12407556 - GAU: 1715

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Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>		Complete if Known			
		Application Number	12/407,556-Conf. #7572		
		Filing Date	March 19, 2009		
		First Named Inventor	Roy G. GORDON		
		An Unit	1715		
		Examiner Name	B. P. Chen		
Sheet	7	of	10	Attorney Docket Number	0042697.00135US7

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	CR**	Hausmann et al., "Rapid Vapor Deposition of Highly Conformal Silica Nanolaminates", <i>Science</i> , Vol. 298, pp. 402-406, 2002	
	CS**	Hausmann et al. "Atomic Layer Deposition of Hafnium and Zirconium Oxides Using Metal Amide Precursors" <i>Chem. Mater.</i> 2002, 14, 4350-4358	
	CT**	Hughes et al. "Why are some properties more difficult to predict than others? A study of QSPR models of solubility, melting point, and Log P" <i>J. Chem. Inf. Model.</i> 2008, 48, 220-232	
	CU**	Ikeeda, Y. et al., "Ozone/Organic-Source APCVD for ULSI Reflow Glass Films: <i>NEC Research and Development, Nippon Electric, Ltd.</i> , No. 94, pp. 1-7, XP000067542, ISSN: 0547-051X, 1 July 1989	
	CV	International Search Report of the International Searching Authority, the European Patent Office, for International Application No. PCT/US03/09736, mailing date September 12, 2003, 7 pages, 3 pages	
	CW	International Search Report of the International Searching Authority, the European Patent Office, for PCT/US01/30507, mailing date August 19, 2002, 5 pages	
	CX**	Jeon et al. "Thermal stability of ultrathin ZrO ₂ films prepared by chemical vapor deposition on Si(100)" <i>Applied Physics Letters</i> , Vol. 78, No. 3, 15 January 2001 (368-370)	
	CY	Jones, et al., "MOCVD and ALD of High-κ Dielectric Oxides Using Alkoxide Precursors," <i>Chemical Vapor Deposition</i> , 2006, 12, pp. 83-98	
	CZ**	Kang et al. Abstract for "Electrical characteristics of highly reliable ultrathin hafnium oxide gate dielectric" (2000), 1 Page.	
	CA1**	Kang et al. Abstract for "Highly reliable thin hafnium oxide gate dielectric" (2000), 1 Page.	

Examiner Signature	/Bret Chen/	Date Considered	09/25/2012
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³ Applicant's unique citation designation number (optional). ⁴ Applicant is to place a check mark here if English language Translation is attached.

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Substitute for form 1449/PTO		Complete if Known			
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Application Number	12/407,556-Conf. #7572		
		Filing Date	March 19, 2009		
		First Named Inventor	Roy G. GORDON		
		An Unit	1715		
		Examiner Name	B. P. Chen		
Sheet	8	of	10	Attorney Docket Number	0042697.00135US7

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume/issue number(s), publisher, city and/or country where published.	T ²
	CB1**	Kington et al., "Alternative dielectrics to silicon dioxide for memory and logic devices", <i>Nature</i> , Vol. 406, pp. 1032-1038, 2000	
	CC1**	Klaus et al., "Atomic Layer Deposition of SiO ₂ at Room Temperature using NH ₃ -catalyzed Sequential Surface Reactions", <i>Surf. Sci.</i> , Vol. 447, pp. 81-90, 2000	
	CD1**	Klaus et al., "Atomic Layer Deposition of SiO ₂ using Catalyzed and Uncatalyzed Self-Limiting Surface Reactions", <i>Surface Review and Letters</i> , Vol. 6, No. 3, pp. 435-448, 1999	
	CE1**	Lee et al. Abstract for "High-quality ultrathin CVD HfO ₂ gate stack with poly-Si gate electrode" (2000), 1 Page.	
	CF1**	Lee et al. Abstract for "Ultrathin hafnium oxide with low leakage and excellent reliability for alternative gate dielectric application," Technical Digest: International Electron Devices Meeting, 1999, 1 Page	
	CG1	Lee et al., "Mass Production Worthy HfO ₂ -Al ₂ O ₃ Laminate Capacitor Technology using Hf Liquid Precursor for Sub-100nm DRAMS", <i>Presented at IEEE IEDM (International Electronic Devices Meeting)</i> , San Francisco, CA, 9-11 December 2002, 4 pages	
	CH1**	Leng et al. Abstract for "Rotating compensator spectroscopic ellipsometry (RCSE) and its application to high-k dielectric film HfO ₂ ," <i>Proceedings of SPIE</i> , 2008, 1 Page.	
	CI1**	McIvor et al., "Preparation and Toxicity of Some Alkyl Thiopyrophosphates", <i>Canadian J. Chemistry</i> , Vol. 34, pp. 1825-1827, 1956	
	CJ1**	Min et al. "Atomic Layer Deposition of TiN Films by Alternate Supply of Tetraakis (ethylmethylamino)-Titanium and Ammonia" <i>J. Appl. Phys.</i> Vol. 37 (1998) 4999-5004	
	CK1**	Monshita et al., "New Substances for Atomic-Layer Deposition of Silicon Dioxide", <i>J. Non-Crystalline Solids</i> , Vol. 187, pp. 66-69, 1995	

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		Application Number	12/407,556-Conf. #7572		
		Filing Date	March 19, 2009		
		First Named Inventor	Roy G. GORDON		
		An Unit	1715		
		Examiner Name	B. P. Chen		
Sheet	9	of	10	Attorney Docket Number	0042697.00135US7

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	CL1**	Nugent et al., "Some Bis(tert-butylimido) Complexes of the Group 6 Transition Metals and a Related Alkylamido Derivative," <i>Inorg. Chem.</i> , Vol. 19, pp. 777-779, 1980	
	CM1**	Okamoto et al., "Convenient Synthetic Route to Mono-Or Dialkyl Phosphate from inorganic Phosphorus Acids", <i>Phosphorus, Sulfur and Silicon</i> , Vol. 55, pp. 195-200, 1991	
	CN1	Ott, et al., "Modification of Porous Alumina Membranes Using Al ₂ O ₃ Atomic Layer Controlled Deposition," <i>Chem. Matter.</i> , 1997, 9, pp. 707-714, 8 pages	
	CO1	Park et al., "Mass-Productive Ultra-Low Temperature ALD SiO ₂ Process Promising for Sub 90nm Memory and Logic Devices", <i>Presented at IEEE IEDM (International Electronic Devices Meeting)</i> , San Francisco, CA, 9-11 December 2002, 4 pages	
	CP1	Puurunen, "Surface Chemistry of Atomic Layer Deposition: A Case Study for the Trimethylaluminum/water Process," <i>Journal of Applied Physics</i> 97, 121301-1 – 121301-52, 2005	
	CQ1**	Qi et al. Abstract for "High-K gate dielectrics," <i>Proceedings of SPIE</i> , 1999, 1 Page.	
	CR1**	Ritala et al., "Atomic Layer Deposition of Oxide Thin Films with Metal Alkoxides as Oxygen Sources", <i>Science</i> , Vol. 288, pp. 319-321, 2000	
	CS1**	Ritala, "Advanced ALE processes of amorphous and polycrystalline films", <i>Applied Surface Science</i> , Vol. 112, pp. 223-230, 1997	
	CT1**	Sun et al., "Interfacial silicon oxide formation during synthesis of ZrO ₂ on Si(100)" <i>Applied Surface Science</i> 161 (2000) 115-122	

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Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	12/407,556-Conf. #7572
				Filing Date	March 19, 2009
				First Named Inventor	Roy G. GORDON
				An Unit	1715
				Examiner Name	B. P. Chen
				Attorney Docket Number	0042697.00135US7
Sheet	10	of	10		

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	CU1	Sundermeyer, "Neue Organometall-imide des Molybdans und Wolframs - die direkte Einfuhrung der Cyclopentadienyl-Gruppe durch Maskierung der hohen Oxidationsstufe," Chem. Ber., 124, 1991, pp. 1977-1979	✓
	CV1	Voronikov, et al., "Reaction of TRIS (Trimethylsilyl) Phosphate with Salts of Inorganic and Organic Acids," UDS 542,91:547.1*128*118, 1 page, 1978	
	CW1**	Yamaguchi et al., "Atomic-Layer Chemical-Vapor-Deposition of Silicon Dioxide Films with an Extremely Low Hydrogen Content", <i>Applied Surface Science</i> , Vols. 130-132, pp. 202-207, 1996	
	CX1**	Zwierzak et al., "Organophosphorus Esters - t-Butyl As Protecting Group in Phosphorylation via Nucleophilic Displacement", <i>Tetrahedron</i> , Vol. 27, pp. 3163-3170, 1971	

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