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(54) Title: BIS(ALKYLIMIDO)-BIS(ALKYLAMIDO)MOLYBDENUM MOLECULES FOR DEPOSITION OF MOLYBDENUM-CONTAINING FILMS

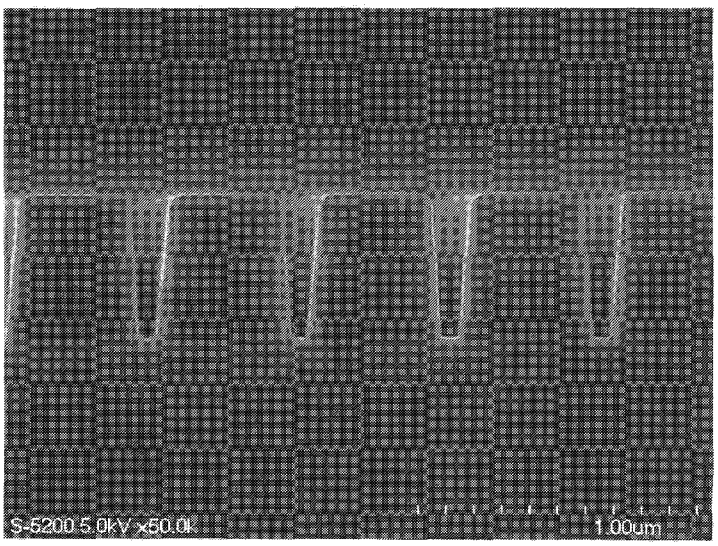


FIG 5

(57) Abstract: Bis(alkylimido)-bis(alkylamido)molybdenum compounds, their synthesis, and their use for the deposition of molybdenum-containing films are disclosed.

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/IB2014/001034

A. CLASSIFICATION OF SUBJECT MATTER

C23C 16/44(2006.01)i, C23C 16/30(2006.01)i, C23C 16/52(2006.01)i

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)
C23C 16/44; C23C 16/06; C07F 17/00; C07F 11/00; B01J 23/882; C23C 16/40; C23C 16/32; H01L 21/31; H01L 21/44; C23C 16/30; C23C 16/52

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
Korean utility models and applications for utility models
Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
eKOMPASS(KIPO internal) & Keywords: ALD, molybdenum, nitrogen, hydrogen, precursor, deposition, and plasma

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 2012-027575 A1 (SIGMA-ALDRICH CO. LLC et al.) 01 March 2012 See abstract; paragraphs [0019]-[0025]; and claims 1-3.	1-10
A	WO 2010-114386 A1 (UNIVERSITETET I OSLO et al.) 07 October 2010 See abstract; page 4, line 35 - page 6, line 8; and claims 1,2.	1-10
A	US 2004-0033699 A1 (HECTOR et al.) 19 February 2004 See abstract; paragraphs [0019],[0020]; and claims 1,10,11.	1-10
A	US 6359160 B1 (SUN et al.) 19 March 2002 See abstract; column 3, lines 7-13; claims 1-4; and figure 3.	1-10
A	US 5064686 A (MCGEARY, MICHAEL J.) 12 November 1991 See abstract; column 4, line 10 - column 6, line 20; and claim 1.	1-10

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

* Special categories of cited documents:
"A" document defining the general state of the art which is not considered to be of particular relevance
"E" earlier application or patent but published on or after the international filing date
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"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents,such combination being obvious to a person skilled in the art
"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
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INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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		US 6114242 A	05/09/2000
US 5064686 A	12/11/1991	None	