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(54) Title: HETEROLEPTIC PYRROLECARBALDIMINE PRECURSORS

(57) Abstract: Disclosed are precursors having a pyrrolecarbaldimines ligand and methods of synthesizing the same. The pyrrolecarbaldimines ligand may be substituted.



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A. CLASSIFICATION OF SUBJECT MATTER*C07F 15/04(2006.01)i, C07F 15/06(2006.01)i, C07F 15/00(2006.01)i, C23C 16/06(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)

C07F 15/04; C08F 4/60; C07D 207/335; C07F 15/06; C23C 16/18

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: pyrroly, carbaldimine, diketiminato, amidinate, ligand, precursor, CVD, ALD.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|--|-----------------------|
| A | C.S.B. Gomes et al., Inorganica Chimica Acta, Vol. 367, Is. 1, 28 February 2011, Pages 151-157 See page 153 and scheme 2. | 1-14 |
| A | US 2008-0305260 A1 (SHENAI-KHATKHATE DEODATTA VINAYAK et al.) 11 December 2008 See [0013]-[0015], claims 7 and 10. | 1-14 |
| A | US 2009-0208637 A1 (CHEN TIANNIU et al.) 20 August 2009 See [0031], claims 116-118. | 1-14 |
| A | JP 2001-261639 A (MITSUBISHI CHEMICALS CORP) 26 September 2001 See [0016], claims 1 and 5. | 1-14 |

 Further documents are listed in the continuation of Box C. See patent family annex.

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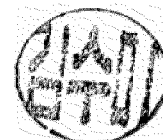
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Information on patent family members

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| Patent document cited in search report | Publication date | Patent family member(s) | Publication date |
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| JP 2001-261639 A | 26.09.2001 | None | |