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(54) Title: COATED SUBSTRATES, ORGANOMETALLIC FILMS AND METHODS FOR APPLYING ORGANOMETALLIC FILMS TO SUBSTRATES

(57) Abstract: A coated article comprising a substrate having a plastic surface and adhered thereto an organometallic film in which the metal has f electron orbitals or is niobium is disclosed. Also disclosed are methods for applying organometallic films to substrates and the organometallic films themselves.

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2007/023964

A. CLASSIFICATION OF SUBJECT MATTER
INV. B05D7/02 C08J7/04

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)
B05D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 2004 026986 A (KOBE STEEL LTD) 29 January 2004 (2004-01-29) the whole document -& DATABASE WPI Week 200429 Thomson Scientific, London, GB; AN 2004-308331 XP002478209 & JP 2004 026986 A (KOBE STEEL LTD) 29 January 2004 (2004-01-29) abstract	1-24
A	----- WO 2005/014742 A (LEIBNIZ INST FUER NEUE MATERIA [DE]; CANON KK [JP]; SCHMIDT HELMUT [DE] 17 February 2005 (2005-02-17) page 11, line 31 ----- -/--	1-24

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 document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *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

6 April 2009

Date of mailing of the international search report

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 2004/058913 A (ELAM T LTD [GB]; KATHIRGAMANATHAN POOPATHY [GB]; PRICE RICHARD [GB]; G) 15 July 2004 (2004-07-15) page 22, line 12 - line 17 page 2, line 24 - line 25; claims 3,6,10 -----	1-24

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box II.2

Claims Nos.: 1-24(partially)

The present claims 1, 11 relates to an extremely large number of possible products and methods. Support and disclosure in the sense of Article 6 and 5 PCT is to be found however for only a very small proportion of the products and methods claimed, see paragraph [0013]. The non-compliance with the substantive provisions is to such an extent, that the search was performed taking into consideration the non-compliance in determining the extent of the search of claims 1 and 11 (PCT Guidelines 9.19 and 9.23).

The search of claim 1 and 11 was restricted to those claimed products and methods which appear to be supported namely wherein the metal having electrons in the f orbital is chosen from the group of La, Hf, Ta, and W.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.2), should the problems which led to the Article 17(2)PCT declaration be overcome.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2007/023964

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.: 1-24(partially)
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/210

3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. As all required additional search fees were timely paid by the applicant, this international search report covers allsearchable claims.

2. As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.

3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
1-24(partially) subjects 1 and 3

4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-24(partially)

Coated article according to claim 1 wherein the metal is La.
Process according to claim 11 wherein the metal is La.

2. claims: 1-24(partially)

Coated article according to claim 1 wherein the metal is Hf.
Process according to claim 11 wherein the metal is Hf.

3. claims: 1-24(partially)

Coated article according to claim 1 wherein the metal is Ta
or Nb.
Process according to claim 11 wherein the metal is Ta or Nb.

4. claims: 1-24(partially)

Coated article according to claim 1 wherein the metal is W.
Process according to claim 11 wherein the metal is W.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/US2007/023964

Patent document cited in search report	A	Publication date	Patent family member(s)	Publication date
JP 2004026986	A	29-01-2004	NONE	
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			CN 1703473	A 30-11-2005
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			JP 2007515498	T 14-06-2007
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			JP 2006512436	T 13-04-2006
			US 2006072053	A1 06-04-2006
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