

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
20 November 2008 (20.11.2008)

PCT

(10) International Publication Number
WO 2008/139320 A3

(51) International Patent Classification:

C09D 167/00 (2006.01) **G03F 7/09** (2006.01)
C09D 171/00 (2006.01) **H01L 21/00** (2006.01)

(21) International Application Number:

PCT/IB2008/001208

(22) International Filing Date:

9 May 2008 (09.05.2008)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

11/747,936 14 May 2007 (14.05.2007) US

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

(88) Date of publication of the international search report:

27 August 2009

(54) Title: ANTIREFLECTIVE COATING COMPOSITIONS

(57) Abstract: The present invention relates to anti reflective coating compositions.



WO 2008/139320 A3

INTERNATIONAL SEARCH REPORT

International application No

PCT/IB2008/001208

A. CLASSIFICATION OF SUBJECT MATTER

INV. C09D167/00 C09D171/00 G03F7/09 H01L21/00

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)

G03F H01L C09D

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2006/030320 A (AZ ELECTRONIC MATERIALS USA [US]) 23 March 2006 (2006-03-23) page 29, line 8 - page 30, line 6 -----	3-13
X	EP 1 598 702 A (ROHM & HAAS ELECT MATERIALS [US]) 23 November 2005 (2005-11-23) paragraphs [0001], [0110], [0118]; examples 26,33,52; table 3 -----	3-13
X	US 2004/101779 A1 (WU HENG PENG [US] ET AL) 27 May 2004 (2004-05-27) paragraph [0042]; example 1 -----	3-13
P,X	WO 2008/017954 A (AZ ELECTRONIC MATERIALS USA [US]) 14 February 2008 (2008-02-14) the whole document -----	3-13

☐ 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.

8 document member of the same patent family

Date of the actual completion of the international search

26 February 2009

Date of mailing of the international search report

15/07/2009

Name and mailing address of the ISA/

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FURTHER INFORMATION CONTINUED FROM PCT/SA/ 210

Continuation of Box II.2

Claims Nos.: 1,2,14,15

Present claims 1 and 14 relate to a resin composition and to a method of its application which has a given desired property or effect, namely the tuning of the refractive index and the tuning of the absorption parameter to the requirements of a customer or simulation. However, the description does not provide support and disclosure in the sense of Article 6 and 5 PCT for any such resin composition and method of its application having the said property or effect and there is no common general knowledge of this kind available to the person skilled in the art. This the more, as claims 1 and 14 do not contain any technical features that indicate how this desired result might be achieved. Furthermore, the test methods and test conditions for these parameters are not indicated. This 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 these claims 1 and 14 (PCT Guidelines 9.19 and 9.20).

The initial phase of the search revealed a very large number of documents relevant to the issue of novelty for claim 2, as this claim defines any mixture of polyester/polyester, polyester/polyether and polyether/polyether. So many documents were retrieved that it is impossible to determine which parts of the claim 2 may be said to define subject-matter for which protection might legitimately be sought (Article 6 PCT). For these reasons, the search was performed taking into consideration the non-compliance in determining the extent of the search of claim 2.

Therefore the search was restricted to claims 3 to 13 (in part).

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/IB2008/001208

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, 2, 14, 15
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.:
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.:

3-13 (in part)

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/SA/ 210

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

1. claims: 3-13 (in part)

An antireflective coating composition comprising polyester, polyether and crosslinker, preferably a glycouril derivative.

2. claims: 3-13 (in part)

An antireflective coating composition comprising a first polyester, a second polyester and crosslinker, preferably a glycouril derivative.

3. claims: 3-13 (in part)

An antireflective coating composition comprising a first polyether, a second polyether and crosslinker, preferably a glycouril derivative.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/IB2008/001208

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 2006030320	A	23-03-2006	EP 1805561 A2	11-07-2007
			JP 2008513567 T	01-05-2008
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			US 2008038659 A1	14-02-2008