



(43) International Publication Date
8 November 2012 (08.11.2012)

W I P O | P C T

(10) International Publication Number
WO 2012/151409 A3

(51) International Patent Classification:

C08G 18/62 (2006.01) C08G 18/24 (2006.01)
C08G 18/22 (2006.01)

(21) International Application Number:

PCT/US2012/036339

(22) International Filing Date:

3 May 2012 (03.05.2012)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/481,771 3 May 2011 (03.05.2011) US

(71) Applicant (for all designated States except US): **COAT-
INGS FOREIGN IP CO. LLC** [US/US]; c/o The Corpora-
tion Trust Company, Corporation Trust Center, 1209 Or-
ange Street, Wilmington, Delaware 19801 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **BECKER, Wiebke**
[DE/DE]; Elvenholzfeld 10, 45289 Essen (DE).
DREGER, Katharina [DE/DE]; Tubinger Strasse 17,
40593 Dusseldorf (DE). **FLOSBACH, Carmen** [DE/DE];
Marpe 41, D-42287 Wuppertal (DE).

(74) Agent: XU, Gann; E. I. du Pont de Nemours and Com-
pany, Legal Patent Records Center, 4417 Lancaster Pike,
Wilmington, Delaware 19805 (US).

(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, CL, 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, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD,
SE, SG, SK, SL, SM, ST, SV, SY, TH, 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, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ,
UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ,
TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK,
EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV,
MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM,
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:

11 July 2013

(54) Title: CATALYST COMPOUND FOR TWO-COMPONENT COATING COMPOSITIONS

(57) Abstract: The invention relates to catalyst compounds for water-based two-component coating compositions comprising: I) at least one organo-metal catalyst for the curing reaction between isocyanate groups and functional groups reactive towards isocyanate groups and II) at least one oligomeric or polymeric binder compound having a glass transition temperature T_g of ≥20° C, measured by DSC (differential scanning calorimetry) at a heating rate of 10 K/min, wherein the glass transition temperature T_g of binder compound II) is above the temperature at which a water-based two-component coating composition comprising the catalyst compound is applied, preferably is at least 10° C, more preferred at least 20° C above the temperature at which said two-component coating composition is applied.



WO 2012/151409 A3

INTERNATIONAL SEARCH REPORT

International application No

PCT/US2012/036339

A. CLASSIFICATION OF SUBJECT MATTER
INV. C08G18/62 C08G18/22 C08G18/24
ADD.

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)
C08G

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 practicable, 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.
X	wo 01/92362 AI (AKZO NOBEL NV [NL]) 6 December 2001 (2001-12-06) cited in the applicati on page 1, line 29 - page 2, line 2; example 6 -----	1,5,7-9 , 12 , 13 , 15
X	EP 1 193 279 A2 (KANSAI PAINT CO LTD [JP]) 3 April 2002 (2002-04-03) paragraph [0001] ; example 1 -----	1,5-9 , 12 , 13 , 15
X	US 2008/234410 AI (VAN ENGELEN ANTONIUS HENDRIKUS [NL] ET AL VAN ENGELEN ANTONIUS HENDRIK) 25 September 2008 (2008-09-25) examples A1,A2,AA,AB,AC,AD,AE; tabl e 1 examples C1-C6; tabl e 3 ----- -/- .	1,5,7-9 , 12 , 13 , 15



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

"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

16 May 2013

Date of mailing of the international search report

23/05/2013

Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040,
Fax: (+31-70) 340-3016

Authorized officer

Bezard, Stephane

INTERNATIONAL SEARCH REPORT

International application No

PCT/US2012/036339

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 677 541 A1 (ICI PLC [GB] PPG IND OHIO INC [US]) 18 October 1995 (1995-10-18) page 2, lines 1-4 page 8, lines 22-42 -----	1, 5-9, 12, 13, 15
X	US 2007/197727 A1 (LEWIN LAURA ANN [US] ET AL) 23 August 2007 (2007-08-23) paragraphs [0002], [0006], [0016], [0075] - [0076]; example 1; table 1 -----	1, 5-9, 12, 13, 15
A	US 7 923 113 B2 (DOGAN NAZIRE [NL] ET AL) 12 April 2011 (2011-04-12) claims 1, 16 -----	1-15

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2012/036339

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 0192362	A l	06-12-2001	AU 6032501 A 11-12-2001
		AU 6747901 A 11-12-2001	
		AU 2001260325 B2 10-03-2005	
		AU 2001267479 B2 28-04-2005	
		BR 0111020 A 17-06-2003	
		BR 0111027 A 17-06-2003	
		CN 1430634 A 16-07-2003	
		CN 1432031 A 23-07-2003	
		DE 60125929 T2 08-11-2007	
		EP 1285012 A l 26-02-2003	
		EP 1285013 A l 26-02-2003	
		ES 2277924 T3 01-08-2007	
		JP 4906221 B2 28-03-2012	
		JP 2003535197 A 25-11-2003	
		JP 2004508427 A 18-03-2004	
		KR 20030001477 A 06-01-2003	
		KR 20030007676 A 23-01-2003	
		US 2002032248 A l 14-03-2002	
		US 2003181625 A l 25-09-2003	
		US 2003212164 A l 13-11-2003	
		WO 0192362 A l 06-12-2001	
		WO 0192363 A l 06-12-2001	
		ZA 200209571 A 30-09-2003	
		ZA 200209576 A 10-10-2003	
EP 1193279	A2	03-04-2002	EP 1193279 A2 03-04-2002
			US 2002061957 A l 23-05-2002
US 2008234410	A l	25-09-2008	AT 465194 T 15-05-2010
			AU 2006281351 A l 22-02-2007
			AU 2006281352 A l 22-02-2007
			ES 2344154 T3 19-08-2010
			JP 2009504864 A 05-02-2009
			JP 2009504865 A 05-02-2009
			US 2008234410 A l 25-09-2008
			US 2008281034 A l 13-11-2008
			WO 2007020269 A l 22-02-2007
			WO 2007020270 A l 22-02-2007
EP 0677541	A l	18-10-1995	AU 690635 B2 30-04-1998
			AU 1632095 A 26-10-1995
			CA 2146476 A l 16-10-1995
			DE 69527224 D l 08-08-2002
			DE 69527224 T2 17-10-2002
			EP 0677541 A l 18-10-1995
			ES 2177589 T3 16-12-2002
			JP H0852422 A 27-02-1996
US 2007197727	A l	23-08-2007	EP 1984416 A2 29-10-2008
			US 2007197727 A l 23-08-2007
			WO 2007098015 A2 30-08-2007
US 7923113	B2	12-04-2011	AT 438672 T 15-08-2009
			AU 2006325338 A l 21-06-2007
			EP 1963392 A l 03-09-2008
			ES 2330793 T3 15-12-2009
			KR 20080078038 A 26-08-2008
			US 2009142600 A l 04-06-2009

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2012/036339

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2007068683 A 121-06-2007			