

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
18 October 2007 (18.10.2007)

PCT

(10) International Publication Number  
**WO 2007/117900 A3**

(51) International Patent Classification:

C08G 18/22 (2006.01) C08G 18/64 (2006.01)  
C08G 18/24 (2006.01) C08G 18/80 (2006.01)  
C08G 18/48 (2006.01) C09D 175/04 (2006.01)  
C08G 18/58 (2006.01)

Shandy Springs Drive, Pearland, Texas 77584 (US).  
**GROSSE-BRINKHAUS, Karl-Heinz** [DE/DE]; Hagen-  
str. 90, 48301 Nottuln (DE). **OTT, Guenter** [DE/DE];  
Von-Holte-Str. 101a, 48167 Münster (DE). **REUTER,  
Hardy** [DE/DE]; An der Vogelruth 28, 48167 Münster  
(DE).

(21) International Application Number:

PCT/US2007/064470

(74) Agent: **SABOURIN, Anne, Gerry**; Basf Corporation,  
1609 Biddle Ave., Wyandotte, Michigan 48192 (US).

(22) International Filing Date: 21 March 2007 (21.03.2007)

(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH,  
CN, CO, CR, CU, CZ, DE, DK, DM, 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, 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.

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

11/278,030 30 March 2006 (30.03.2006) US

(71) Applicant (for all designated States except US): **BASF  
CORPORATION** [US/US]; Basf Corporation, 1609 Bid-  
dle Ave., Wyandotte, Michigan 48192 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **DECEMBER,  
Timothy** [US/US]; 546 Parkland, Rochester Hills, Michi-  
gan 48307 (US). **ORTIZ, Cesar, G.** [US/US]; 12921

(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, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL,

[Continued on next page]

(54) Title: A METHOD OF CATALYZING A REACTION TO FORM A URETHANE COATING AND A COMPLEX FOR USE  
IN THE METHOD

50 MEK Double Rub Performance

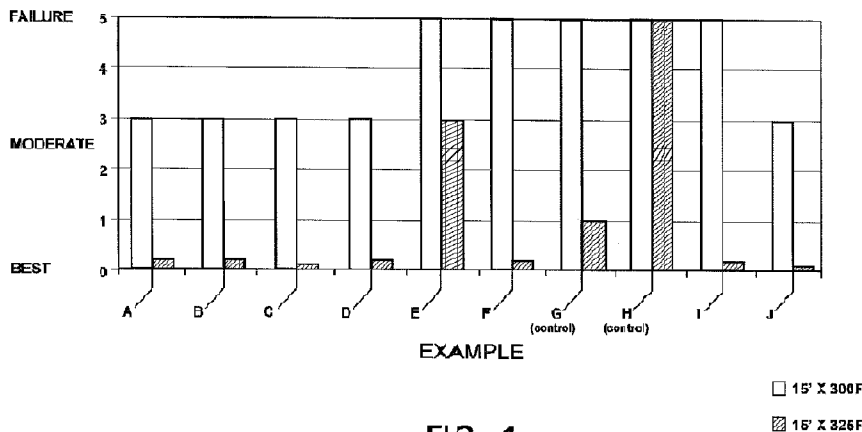


FIG - 1

(57) Abstract: A urethane coating is formed by a reaction of a hydroxy-functional resin and a blocked isocyanate crosslinker. A method of catalyzing this reaction includes forming a polymeric ligand from the resin and/or the crosslinker. The method also includes incorporating a metal catalyst with the polymeric ligand to complex the metal catalyst with the polymeric ligand. The method further includes reacting resin and the crosslinker to form the urethane coating.

WO 2007/117900 A3



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*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

**Declaration under Rule 4.17:**

- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

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

25 September 2008

**INTERNATIONAL SEARCH REPORT**

International application No  
PCT/US2007/064470

**A. CLASSIFICATION OF SUBJECT MATTER**

INV. C08G18/22 C08G18/24 C08G18/48 C08G18/58 C08G18/64  
C08G18/80 C09D175/04

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)  
C08G 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, 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 00/34398 A (DU PONT [US]) 15 June 2000 (2000-06-15)  page 1, lines 5-8 examples pages,6-10 claim 1	1-3, 6-10, 12-16, 19-21, 25-29,32
X	US 6 353 057 B1 (HE ZHIQIANG [US], ET AL) 5 March 2002 (2002-03-05)  column 1, lines 5-17 examples 4-8 claim 1	1-3,6-9, 14-16, 19-21, 25-27, 29,32
	----- -/--	

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

24 July 2008.

Date of mailing of the international search report

31/07/2008

Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Bezard, Stéphane

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US2007/064470

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 089 645 A (NICHOLS JAMES D [US] ET AL) 18 February 1992 (1992-02-18)  column 1, lines 15-20 example 14 column 13, lines 64-67 claim 1  -----	1-5, 9-11, 15, 16, 18, 20-22, 24, 28, 29, 31

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2007/064470

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 0034398	A	15-06-2000	AU 763475 B2 24-07-2003
			AU 1749300 A 26-06-2000
			BR 9916878 A 21-08-2001
			CA 2347426 A1 15-06-2000
			CN 1329646 A 02-01-2002
			DE 69919389 D1 16-09-2004
			DE 69919389 T2 04-08-2005
			EP 1135443 A1 26-09-2001
			JP 2002531677 T 24-09-2002
			US 6156823 A 05-12-2000
US 6353057	B1	05-03-2002	CA 2359915 A1 17-08-2000
			EP 1165636 A1 02-01-2002
			JP 2002536513 T 29-10-2002
			TW 572908 B 21-01-2004
			WO 0047642 A1 17-08-2000
US 5089645	A	18-02-1992	NONE