

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
15 November 2007 (15.11.2007)

PCT

(10) International Publication Number
WO 2007/128739 A3

(51) International Patent Classification:

C08G 18/30 (2006.01) B05B 7/24 (2006.01)
C09D 175/04 (2006.01) B05D 5/00 (2006.01)

(21) International Application Number:

PCT/EP2007/054231

(22) International Filing Date: 1 May 2007 (01.05.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/796,525 2 May 2006 (02.05.2006) US
60/796,526 2 May 2006 (02.05.2006) US
06115011.6 6 June 2006 (06.06.2006) EP
06115010.8 6 June 2006 (06.06.2006) EP

(71) Applicant (for all designated States except US):

AKZO NOBEL COATINGS INTERNATIONAL
B.V. [NL/NL]; Velperweg 76, NL-6824 BM Arnhem (NL).

(72) Inventors; and

(75) Inventors/Applicants (for US only): VAN ENGELEN,
Antonius Hendrikus Gerardus [NL/NL]; Westerhout 12,

NL-2211 TV Noordwijkerhout (NL). **KLINKENBERG, Huig** [NL/NL]; Parnassia 76, NL-2224 DD Katwijk (NL). **VAN PUL, Maarten** [NL/NL]; Frans Halslaan 195, NL-2343 EE Oegstgeest (NL). **SONNEVELDT, Martijn** [NL/NL]; Lorentzstraat 68, NL-3817 XM Amersfoort (NL). **BLY, David, C.** [US/US]; 750 Nile Drive, Alpharetta, GA 230022 (US).

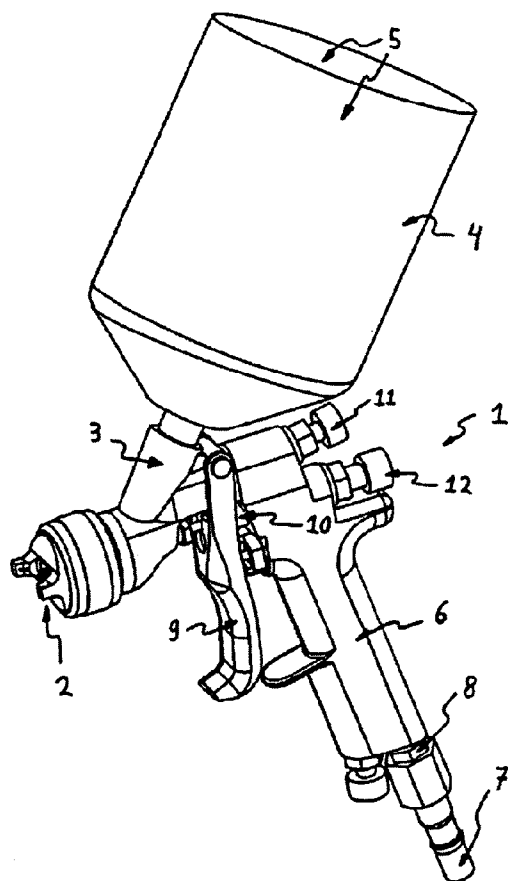
(74) Agent: **SCHALKWIJK, Pieter Cornelis**; Akzo Nobel N.V., Intellectual Property Department (Dept. AIP), P.O. Box 9300, NL-6800 SB Arnhem (NL).

(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.

[Continued on next page]

(54) Title: PROCESS AND PAINT SPRAY DEVICE



(57) Abstract: The invention relates to a process of refinishing an automobile wherein a solvent-borne isocyanate based moisture-curing coating composition is applied to an automobile surface, wherein the solvent-borne isocyanate based moisture-curing coating composition is provided in a moisture-tight container. The invention also covers a spraying device comprising a spray nozzle and a feed line between the spray nozzle and an open end surrounded by a first connection member to connect the open end of the feed line to a corresponding second connection member surrounding an opening of a compressible paint container, characterized in that the paint container is provided with a closing valve to close off the opening of the paint container and in that the first connection member is provided with a member acting on the valve to allow its being opened when the first and second connection members are mutually connected.

WO 2007/128739 A3



(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, 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*

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

10 April 2008

INTERNATIONAL SEARCH REPORT

International application No
PCT/EP2007/054231

A. CLASSIFICATION OF SUBJECT MATTER
INV. C08G18/30 C09D175/04 B05B7/24 B05D5/00

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)
C08G C09D B05D B05B

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	DE 32 45 294 A (BASF) 14 June 1984 (1984-06-14) page 2, line 1 - page 5, line 22 page 7, line 6 claims 1,2; table 1	1
X	EP 0 662 487 A (BAYER) 12 July 1995 (1995-07-12) page 2, line 16 - page 4, line 57; claims 1,5; examples 1-4	1
X	EP 0 566 954 A (BAYER) 27 October 1993 (1993-10-27) page 2, line 17 - page 6, line 24; claims 1,6; examples 1-8,13-15	1
	-/--	

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

Date of mailing of the international search report

18 February 2008

25/02/2008

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

Brévier, François

INTERNATIONAL SEARCH REPORT

International application No
PCT/EP2007/054231

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 0 406 604 A (BAYER) 9 January 1991 (1991-01-09) page 2, line 19 - page 4, line 57; claim 1; examples 1,2 -----	1
A	US 2003/209573 A1 (BOUIC PHILLIP J [GB]) 13 November 2003 (2003-11-13) paragraphs [0003], [0006], [0016], [0032], [0033], [0036], [0118], [0130] - [0135]; figures 13,5-9 -----	2,3,7, 10-13
X	US 5 819 986 A (LAST LAURENS [NL] ET AL) 13 October 1998 (1998-10-13) column 1, line 8 column 6, line 49 - column 7, line 3; figures -----	3-13
X	EP 0 270 302 A (UNILEVER PLC [GB]; UNILEVER NV [NL]) 8 June 1988 (1988-06-08) abstract column 4, lines 39-41 column 7, lines 1-9; figures 4,1 -----	3-6, 10-12
A	EP 1 470 867 A (OREAL [FR]) 27 October 2004 (2004-10-27) abstract; claim 1; figures 5-9 -----	3-7
A	EP 0 451 388 A (NOMIX CHIPMAN LTD [GB]) 16 October 1991 (1991-10-16) abstract; figures 4-6 -----	3-6
A	US 6 561 386 B1 (MARTENS MATTHEW P [US]) 13 May 2003 (2003-05-13) column 6, lines 4-26 -----	3-6,12

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/EP2007/054231

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
DE 3245294	A	14-06-1984	NONE
EP 0662487	A	12-07-1995	AT 156496 T 15-08-1997 CA 2139456 A1 08-07-1995 DE 4400224 A1 13-07-1995 ES 2105485 T3 16-10-1997 JP 7233350 A 05-09-1995 US 5468833 A 21-11-1995
EP 0566954	A	27-10-1993	AT 139241 T 15-06-1996 CA 2094617 A1 24-10-1993 DE 4213361 A1 28-10-1993 ES 2088186 T3 01-08-1996 JP 3227021 B2 12-11-2001 JP 6016759 A 25-01-1994 MX 9302125 A1 01-10-1993 US 5508372 A 16-04-1996
EP 0406604	A	09-01-1991	BR 9003061 A 27-08-1991 CA 2018885 A1 01-01-1991 DD 298414 A5 20-02-1992 ES 2041077 T3 01-11-1993 JP 2835639 B2 14-12-1998 JP 3050276 A 04-03-1991 US 5081203 A 14-01-1992
US 2003209573	A1	13-11-2003	AU 2003228906 A1 11-11-2003 CA 2483127 A1 20-11-2003 CN 1652878 A 10-08-2005 EP 1503863 A1 09-02-2005 JP 2006510469 T 30-03-2006 WO 03095101 A1 20-11-2003
US 5819986	A	13-10-1998	AT 169247 T 15-08-1998 AU 694186 B2 16-07-1998 AU 1825095 A 03-10-1995 BR 9507004 A 16-09-1997 CA 2184243 A1 21-09-1995 CN 1143339 A 19-02-1997 DE 69503883 D1 10-09-1998 DE 69503883 T2 25-03-1999 DK 749358 T3 03-05-1999 EP 0749358 A1 27-12-1996 ES 2122554 T3 16-12-1998 JP 3432227 B2 04-08-2003 JP 10500610 T 20-01-1998 NL 9400346 A 02-10-1995 WO 9524972 A1 21-09-1995 RU 2137553 C1 20-09-1999
EP 0270302	A	08-06-1988	AU 598322 B2 21-06-1990 AU 8160387 A 02-06-1988 DE 3769938 D1 13-06-1991 NO 874924 A 30-05-1988 NZ 222666 A 27-07-1989 ZA 8708934 A 26-07-1989
EP 1470867	A	27-10-2004	FR 2854084 A1 29-10-2004

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/EP2007/054231

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 1470867	A		JP 2004321806 A KR 20040093032 A US 2004222315 A1	18-11-2004 04-11-2004 11-11-2004
EP 0451388	A	16-10-1991	AU 7388291 A CA 2039367 A1 ZA 9102496 A	24-10-1991 12-10-1991 29-01-1992
US 6561386	B1	13-05-2003	NONE	