

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
27 December 2007 (27.12.2007)

PCT

(10) International Publication Number
WO 2007/148275 A3

- (51) **International Patent Classification:**
C11D 1/12 (2006.01)
- (21) **International Application Number:**
PCT/IB2007/052302
- (22) **International Filing Date:** 15 June 2007 (15.06.2007)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
60/814,727 19 June 2006 (19.06.2006) US
- (71) **Applicant (for all designated States except US):** **THE PROCTER & GAMBLE COMPANY** [US/US]; One Procter & Gamble Plaza, Cincinnati, Ohio 45202 (US).
- (72) **Inventors; and**
- (75) **Inventors/Applicants (for US only):** **ENGLISH III, Jack, Wesley** [US/US]; 7605 Bonnie Drive, West Chester, Ohio 45069 (US). **SCHNEIDERMAN, Eva** [SK/US]; 4578 Meadowbrook Lane, Mason, Ohio 45040 (US). **SOPER, Shari, Joy** [US/US]; 5577 Red Fox Court, Mason, Ohio 45040 (US). **SCHAEFER, Jared, John** [US/US]; 1242 Garden Circle, Wyoming, Ohio 45215 (US).
- (74) **Common Representative:** **THE PROCTER & GAMBLE COMPANY**; c/o Eileen L. Hughett, The Procter & Gamble Company, Winton Hill Business Center 6110 Center, Hill Road, Cincinnati, Ohio 45224 (US).
- (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, 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, 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:**
6 March 2008



WO 2007/148275 A3

(54) **Title:** LAUNDRY DETERGENT CONTAINING METHYL ESTER SULFONATE

(57) **Abstract:** Laundry detergent compositions containing from about 6% to about 35% of a surfactant component; wherein the surfactant component comprises: from about 0.5 to about 15%, by weight of the composition, of an MES blend having an average level of disalt of from about 8% to about 50%, wherein said MES blend comprises C16 MES; and wherein a ratio of C16 MES to surfactant component is less than about 0.3.

INTERNATIONAL SEARCH REPORT

International application No

PCT/IB2007/052302

A. CLASSIFICATION OF SUBJECT MATTER INV. C11D1/12		
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) C11D		
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.
Y	US 6 407 050 B1 (HUIH PAUL DANTON [US] ET AL) 18 June 2002 (2002-06-18) claims 1-23	1-10
Y	US 5 637 758 A (SAJIC BRANKO [US] ET AL) 10 June 1997 (1997-06-10) claim 1; example 4c	1-10
Y	WO 02/28993 A (HUIH DETERGENTS INC [US]) 11 April 2002 (2002-04-11) claims 1-23	1-10
A	WO 01/90284 A (HUIH DETERGENTS INC [US]) 29 November 2001 (2001-11-29) claims 1-53	1-10
	----- -/--	
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> 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 10 December 2007		Date of mailing of the international search report 21/12/2007
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 Richards, Michael

INTERNATIONAL SEARCH REPORT

International application No
PCT/IB2007/052302

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	GB 2 179 055 A (UNILEVER PLC) 25 February 1987 (1987-02-25) claims 1-10 -----	1-10
A	WO 98/42813 A (CORPORACION CRESSIDA [HN]; ROLFES THOMAS R [US]) 1 October 1998 (1998-10-01) tables 1-7 -----	1-10
A	WO 01/89472 A (HUIISH DETERGENTS INC [US]) 29 November 2001 (2001-11-29) claims 1-29 -----	1-10
A	US 6 534 464 B1 (HUIISH PAUL DANTON [US] ET AL) 18 March 2003 (2003-03-18) claims 1-24 -----	1-10
A	DE 42 42 185 A1 (HENKEL KGAA [DE]) 16 June 1994 (1994-06-16) example 5 -----	1-10

INTERNATIONAL SEARCH REPORT

International application No

PCT/IB2007/052302

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 6407050	B1	18-06-2002	US 2003119702 A1	26-06-2003
US 5637758	A	10-06-1997	AU 7974994 A CN 1137286 A DE 69423225 D1 DE 69423225 T2 EP 0723576 A1 ES 2142958 T3 JP 2710468 B2 JP 9505088 T WO 9510585 A1 US 5616781 A	04-05-1995 04-12-1996 06-04-2000 21-06-2000 31-07-1996 01-05-2000 10-02-1998 20-05-1997 20-04-1995 01-04-1997
WO 0228993	A	11-04-2002	AU 9653401 A CA 2426863 A1 US 6764989 B1	15-04-2002 11-04-2002 20-07-2004
WO 0190284	A	29-11-2001	AU 6330001 A CA 2412252 A1 EP 1317521 A1 US 2004248758 A1	03-12-2001 29-11-2001 11-06-2003 09-12-2004
GB 2179055	A	25-02-1987	IN 166046 A1 JP 1771613 C JP 4063120 B JP 62041300 A PH 22907 A	03-03-1990 14-07-1993 08-10-1992 23-02-1987 24-01-1989
WO 9842813	A	01-10-1998	CA 2284990 A1 EP 0972003 A1 US 5972861 A	01-10-1998 19-01-2000 26-10-1999
WO 0189472	A	29-11-2001	AU 6330101 A CA 2412254 A1 EP 1286656 A1 US 6683039 B1 US 2004127384 A1	03-12-2001 29-11-2001 05-03-2003 27-01-2004 01-07-2004
US 6534464	B1	18-03-2003	US 6780830 B1	24-08-2004
DE 4242185	A1	16-06-1994	AT 159044 T WO 9413771 A1 EP 0674700 A1 ES 2109662 T3 JP 8504458 T	15-10-1997 23-06-1994 04-10-1995 16-01-1998 14-05-1996