



(43) International Publication Date
16 June 2011 (16.06.2011)

(10) International Publication Number
WO 2011/072002 A3

(51) International Patent Classification:

A61K 8/02 (2006.01) *A61K 8/81* (2006.01)
A61Q 5/02 (2006.01) *A61K 8/34* (2006.01)
A61K 8/46 (2006.01)

(21) International Application Number:

PCT/US2010/059441

(22) International Filing Date:

8 December 2010 (08.12.2010)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/267,698 8 December 2009 (08.12.2009) 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): **GLENN, Robert, Wayne** [US/US]; 7930 Royal Fern Court, Liberty Township, Ohio 45044 (US). **KAUFMAN, Kathleen Mary** [US/US]; 5188 Castlebrook Court, Cincinnati, Ohio 45247 (US). **DUNBAR, James Charles** [US/US]; 7096 Misty Meadow Lane, Morrow, Ohio 45152 (US). **GARDLIK, John Michael** [US/US]; 9109 Millecliff Drive, Cincinnati, Ohio 45231 (US). **MURPHY, Bryan Patrick** [US/US]; 974 Arnold Palmer Drive, Loveland, Ohio 45140 (US).

(74) Common Representative: **THE PROCTER & GAMBLE COMPANY**; c/o Eileen L. Hughett, Global

Patent Services, 299 East Sixth Street, Sycamore Building, 4th Floor, Cincinnati, Ohio 45202 (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, RO, RS, RU, 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, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, 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:

8 August 2013

(54) Title: A POROUS, DISSOLVABLE SOLID SUBSTRATE AND SURFACE RESIDENT COATING COMPRISING WATER SENSITIVE ACTIVES

(57) Abstract: The present invention relates to personal care compositions, especially those personal care compositions in the form of a personal care article that is a porous dissolvable solid substrate. The porous dissolvable solid substrate has a surface resident coating comprising a water sensitive active that can deliver a consumer benefit.



WO 2011/072002 A3

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2010/059441

A. CLASSIFICATION OF SUBJECT MATTER

INV. A61K8/02 A61Q5/02 A61K8/46 A61K8/81 A61K8/34
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)

A61K A61Q

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.
Y	WO 2005/075547 A1 (UNILEVER PLC [GB]; UNILEVER NV [NL]; LEVER HINDUSTAN LTD [IN]; COOPER) 18 August 2005 (2005-08-18) the whole document	1
Y	GB 2 355 008 A (PROCTER & GAMBLE [US]) 11 April 2001 (2001-04-11) the whole document	1
Y	DE 199 44 416 A1 (HENKEL KGAA [DE]) 22 March 2001 (2001-03-22) the whole document	1
A	WO 03/037294 A2 (PROCTER & GAMBLE [US]) 8 May 2003 (2003-05-08) examples 43,46	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 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

3 June 2013

Date of mailing of the international search report

07/06/2013

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

Yon, Jean-Michel

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2010/059441

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6 106 849 A (MALKAN NISHA [US] ET AL) 22 August 2000 (2000-08-22) -----	1
A	WO 2004/041991 A1 (SALVONA LLC [US]) 21 May 2004 (2004-05-21) the whole document -----	1
A	WO 03/088933 A1 (SALVONA L L C [US]) 30 October 2003 (2003-10-30) the whole document -----	1

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2010/059441

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2005075547	A1	18-08-2005	AU 2004315405 A1 18-08-2005
		BR PI0418460 A 05-06-2007	
		CA 2553645 A1 18-08-2005	
		CN 1914263 A 14-02-2007	
		CN 1922248 A 28-02-2007	
		CN 1926181 A 07-03-2007	
		EP 1711554 A1 18-10-2006	
		JP 2007519788 A 19-07-2007	
		NZ 548329 A 30-04-2010	
		US 2007225388 A1 27-09-2007	
		WO 2005075547 A1 18-08-2005	
		ZA 200605697 A 28-05-2008	

GB 2355008	A	11-04-2001	AU 7853600 A 10-05-2001
		BR 0014532 A 04-06-2002	
		CA 2385249 A1 12-04-2001	
		CN 1378444 A 06-11-2002	
		EP 1237542 A1 11-09-2002	
		GB 2355008 A 11-04-2001	
		JP 2003510454 A 18-03-2003	
		MX PA02003446 A 20-08-2002	
		WO 0124779 A1 12-04-2001	

DE 19944416	A1	22-03-2001	AU 7775000 A 17-04-2001
		CA 2320500 A1 19-03-2001	
		DE 19944416 A1 22-03-2001	
		WO 0119948 A1 22-03-2001	

WO 03037294	A2	08-05-2003	US 2003180242 A1 25-09-2003
		WO 03037294 A2 08-05-2003	

US 6106849	A	22-08-2000	AU 2331399 A 09-08-1999
		EP 1071399 A1 31-01-2001	
		US 6106849 A 22-08-2000	
		WO 9937284 A1 29-07-1999	

WO 2004041991	A1	21-05-2004	AU 2003263053 A1 07-06-2004
		CA 2483723 A1 21-05-2004	
		CN 1649994 A 03-08-2005	
		EP 1556473 A1 27-07-2005	
		JP 2006504837 A 09-02-2006	
		MX PA04010623 A 20-09-2005	
		US 2003207776 A1 06-11-2003	
		WO 2004041991 A1 21-05-2004	

WO 03088933	A1	30-10-2003	AU 2003221851 A1 03-11-2003
		CA 2482193 A1 30-10-2003	
		EP 1496840 A1 19-01-2005	
		JP 2005533759 A 10-11-2005	
		US 2003194416 A1 16-10-2003	
		WO 03088933 A1 30-10-2003	
