

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
30 October 2003 (30.10.2003)

PCT

(10) International Publication Number
WO 03/088932 A3

(51) International Patent Classification⁷: **A61K 7/075**

(21) International Application Number: PCT/US03/12270

(22) International Filing Date: 22 April 2003 (22.04.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/374,602 22 April 2002 (22.04.2002) US

(71) Applicant: **THE PROCTER & GAMBLE COMPANY**
[US/US]; One Procter & Gamble Plaza, Cincinnati, OH
45202 (US).

(72) Inventors: **WELLS, Robert, Lee**; 4245 Rose Hill Avenue,
Cincinnati, OH 45229 (US). **JOHNSON, Eric, Scott**; 4575 Aspen Drive,
Hamilton, OH 45011 (US).

(74) Agents: **REED, T., David** et al.; The Procter & Gamble
Company, 6110 Center Hill Road, Cincinnati, OH 45224
(US).

(81) Designated States (*national*): AE, AG, AL, AM, AT (utility
model), AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA,

CH, CN, CO, CR, CU, CZ (utility model), CZ, DE (utility
model), DE, DK (utility model), DK, DM, DZ, EC, EE
(utility model), EE, ES, FI (utility model), FI, GB, GD, GE,
GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ,
LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN,
MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU,
SC, SD, SE, SG, SK (utility model), SK, SL, TJ, TM, TN,
TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,
SE, SI, SK, TR), OAPI patent (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:
4 December 2003

*For two-letter codes and other abbreviations, refer to the "Guidance
Notes on Codes and Abbreviations" appearing at the beginning
of each regular issue of the PCT Gazette.*

(54) Title: SHAMPOO CONTAINING A CATIONIC GUAR DERIVATIVE

(57) Abstract: The compositions of the present invention relate to shampoo compositions having from about 5 to about 50 weight percent of a deterative surfactant, at least about 0.05 weight percent of a cationic guar derivative having a molecular weight from about 10,000 to about 10,000,000 and a charge density from about 1.25 meq/g to about 7 meq/g, and at least about 20.0 weight percent of an aqueous carrier.



WO 03/088932 A3

INTERNATIONAL SEARCH REPORT

International Application No.

PCT/US 03/12270

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61K7/075

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)

IPC 7 A61K

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, CHEM ABS Data, 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 99 39683 A (PROCTER & GAMBLE (US)) 12 August 1999 (1999-08-12) page 2, line 9 - line 22 examples 1-3,7,8 page 3, line 8 - line 14 claims 1,7,9 page 12, line 21 -page 14, line 9 page 16, line 14 -page 18, line 6 ---	1-9
X	WO 00 66081 A (PROCTER & GAMBLE) 9 November 2000 (2000-11-09) page 23, line 10 -page 24, line 21; examples VII,XIII page 18, line 20 -page 19, line 23 --- -/--	1-5,7-9

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in 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

13 October 2003

Date of mailing of the international search report

24/10/2003

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

Loloiu, C .

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 03/12270

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 00 66072 A (PROCTER & GAMBLE) 9 November 2000 (2000-11-09) page 3, line 7-10 page 27, line 1 -page 28, paragraph 3 page 49 examples I-II,IV,VI,IX ---	1-5,7-9
X	US 6 297 203 B1 (GUSKEY SUSAN MARIE ET AL) 2 October 2001 (2001-10-02) column 1, line 61 -column 2, line 9; example II column 6, line 25 -column 7, line 55 ---	1,3-7,9
X	FR 2 773 990 A (RHODIA CHIMIE) 30 July 1999 (1999-07-30) page 1, line 33 -page 2, line 11; example 8 page 4, line 5 - line 23 page 6, line 25-27 ---	1-5,7-9
A	EP 0 093 601 A (UNILEVER NV) 9 November 1983 (1983-11-09) page 3, line 13 -page 6, line 12 examples 2F-G page 8, line 13 - line 32 ---	1-5,7,9
A	HOSSEL P ET AL.: "Conditioning polymers in today's shampoo formulations-efficacy, mechanism and test methods" INTERNATIONAL JOURNAL OF COSMETIC SCIENCE, vol. 22, no. 1, pages 1-10, XP002250154 the whole document -----	1-9

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 03/12270

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 9939683	A	12-08-1999	WO 9939683 A1	12-08-1999
WO 0066081	A	09-11-2000	AU 759514 B2	17-04-2003
			AU 4689100 A	17-11-2000
			CA 2370939 A1	09-11-2000
			CN 1353601 T	12-06-2002
			EP 1175202 A1	30-01-2002
			JP 2002543105 T	17-12-2002
			WO 0066081 A1	09-11-2000
			US 6451300 B1	17-09-2002
WO 0066072	A	09-11-2000	AU 4689200 A	17-11-2000
			CA 2370649 A1	09-11-2000
			CN 1356885 T	03-07-2002
			EP 1173141 A1	23-01-2002
			JP 2002543102 T	17-12-2002
			WO 0066072 A1	09-11-2000
			US 2002102228 A1	01-08-2002
US 6297203	B1	02-10-2001	BR 9811701 A	25-07-2000
			CN 1263455 T	16-08-2000
			EP 0975311 A1	02-02-2000
			WO 9850007 A1	12-11-1998
			JP 2001507370 T	05-06-2001
FR 2773990	A	30-07-1999	FR 2773990 A1	30-07-1999
EP 0093601	A	09-11-1983	AT 30169 T	15-10-1987
			AU 546461 B2	05-09-1985
			AU 1398983 A	03-11-1983
			BR 8302154 A	27-12-1983
			CA 1203141 A1	15-04-1986
			DE 3374018 D1	12-11-1987
			EP 0093601 A2	09-11-1983
			ES 8406086 A1	16-10-1984
			GB 2122214 A ,B	11-01-1984
			JP 1319715 C	29-05-1986
			JP 58196300 A	15-11-1983
			JP 60046158 B	14-10-1985
			MY 11887 A	31-12-1987
			NZ 203999 A	13-12-1985
			PH 18615 A	21-08-1985
			PT 76615 A ,B	01-05-1983
			US 5037818 A	06-08-1991
			ZA 8302967 A	28-11-1984