

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

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
3 September 2009 (03.09.2009)

PCT

(10) International Publication Number
WO 2009/106468 A3

(51) International Patent Classification:

A61K 8/34 (2006.01) *A61Q 17/00* (2006.01)
A61K 8/49 (2006.01) *A61Q 15/00* (2006.01)
A61K 8/67 (2006.01)

(21) International Application Number:

PCT/EP2009/051929

(22) International Filing Date:

18 February 2009 (18.02.2009)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

102008011692.0 28 February 2008 (28.02.2008) DE

(71) Applicant (for all designated States except DE, US): **AIR LIQUIDE SANTE (INTERNATIONAL)** [FR/FR]; 75 Quai D'orsay, F-75007 Paris (FR).

(71) Applicant (for DE only): **SCHULKE & MAYR GMBH** [DE/DE]; Robert Koch Strasse 2, 22851 Norderstedt (DE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **BEILFUSS, Wolfgang** [DE/DE]; Timmkoppel 39, 22339 Hamburg (DE). **WEBER, Klaus** [DE/DE]; Isestrasse 88, 20149 Hamburg (DE). **GRADTKE, Ralf** [DE/DE]; Lindenweg 19, 25436 Tornesch (DE). **WUTSCH, Sabine** [DE/DE]; Fühlsbüttler Strasse 733, 22339 Hamburg (DE).

(74) Agent: **CONAN, Philippe**; L'air Liquide Sa, Département Propriété Intellectuelle, 75 Quai D'orsay, 75321 Paris Cedex 07 (FR).

(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, 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, ST, 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, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

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

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:

29 October 2009

(54) Title: ACTIVE INGREDIENT COMBINATION AND USE THEREOF

(57) Abstract: The invention relates to an active ingredient combination which comprises a) glycerol monoalkyl ether, b) bispyridinium alkane, c) polyol and d) antioxidant. The combination is advantageously used for producing a preparation for the treatment of undesired body odour, for example for producing a cosmetic deodorant preparation, an antidandruff hair cleansing composition, a preparation for the treatment of blemished skin and acne or a preparation for the treatment of foot and/or skin fungus.



WO 2009/106468 A3

INTERNATIONAL SEARCH REPORT

International application No

PCT/EP2009/051929

A. CLASSIFICATION OF SUBJECT MATTER

INV. A61K8/34 A61K8/49 A61K8/67 A61Q17/00 A61Q15/00

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)

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 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,Y	DE 42 40 674 C1 (SCHUELKE & MAYR GMBH [DE]) 24 March 1994 (1994-03-24) cited in the application page 7; example D the whole document	1-21
Y	DE 100 28 638 A1 (SCHUELKE & MAYR GMBH [DE]) 20 December 2001 (2001-12-20) cited in the application the whole document	1-21
Y	FR 2 729 050 A (OREAL [FR]) 12 July 1996 (1996-07-12) the whole document	1-21
Y	EP 1 468 700 A (AIR LIQUIDE SANTE INT [FR]; SCHUELKE & MAYR GMBH [DE]) 20 October 2004 (2004-10-20) the whole document	1-21



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.
- *Z* document member of the same patent family

Date of the actual completion of the international search

17 August 2009

Date of mailing of the international search report

31/08/2009

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

Briand, Benoit

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/EP2009/051929

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
DE 4240674	C1	24-03-1994	AT 161712 T 15-01-1998
		EP 0599433 A1 01-06-1994	
		ES 2111711 T3 16-03-1998	
		US 5516510 A 14-05-1996	
DE 10028638	A1	20-12-2001	AR 028693 A1 21-05-2003
		BR 0111532 A 06-07-2004	
		DE 60129705 T2 30-04-2008	
		EP 1301168 A1 16-04-2003	
		ES 2290127 T3 16-02-2008	
		WO 0193825 A1 13-12-2001	
		JP 2003535116 T 25-11-2003	
		US 2005238681 A1 27-10-2005	
		US 2003149097 A1 07-08-2003	
FR 2729050	A	12-07-1996	NONE
EP 1468700	A	20-10-2004	AT 438415 T 15-08-2009
		DE 10317931 A1 11-11-2004	
		JP 2004315537 A 11-11-2004	
		US 2004208782 A1 21-10-2004	