

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

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
17 February 2011 (17.02.2011)

(10) International Publication Number  
**WO 2011/018477 A3**

PCT

(51) International Patent Classification:

**A61K 8/368** (2006.01) **A61Q 5/00** (2006.01)  
**A61Q 19/00** (2006.01)

(21) International Application Number:

PCT/EP2010/061684

(22) International Filing Date:

11 August 2010 (11.08.2010)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

09167623.9 11 August 2009 (11.08.2009) EP

(71) Applicant (for all designated States except US): **DSM IP Assets B.V.** [NL/NL]; Het Overloon 1, NL-6411 TE Heerlen (NL).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **GORALCZYK, Regina** [DE/DE]; Allmendweg 7, 79639 Grenzach-Wyhlen (DE). **MAYNE-MECHAN, Annis Olivia** [GB/CH]; Ahornstrasse 1, CH-4313 Möhlin (CH). **MO-HAJERI, Hasan** [CH/CH]; Büelstrasse 45, CH-8132 Egg b. Zürich (CH). **PIUSSI, Jenny** [DE/DE]; Eichenweg 6, 79418 Schliengen (DE). **RIEGER, Henry** [DE/DE]; Schlossweg 13, 79639 Grenzach-Wyhlen (DE). **SCHWAGER, Joseph** [CH/CH]; Friedensgasse 23, CH-4056 Basel (CH).

(74) Agent: **SCHWANDER, Kuno Josef**; 241/636, Wurmisweg 576, CH-4303 Kaiseraugst (CH).

(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, 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:

27 October 2011

(54) Title: CARNOSOL FOR HAIR AND SKIN CARE

(57) Abstract: This invention relates to the use of an oral composition comprising carnosol which enhances the appearance of hair and skin, and particularly has an anti-greying effect. It further relates methods of improving the appearance of hair and skin by oral administration of an effective amount of carnosol.



WO 2011/018477 A3

# INTERNATIONAL SEARCH REPORT

International application No  
PCT/EP2010/061684

A. CLASSIFICATION OF SUBJECT MATTER  
INV. A61K8/37 A61Q19/00 A61Q5/00  
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

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, EMBASE, 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	JP 2004 307382 A (NAGASE & CO LTD) 4 November 2004 (2004-11-04) cited in the application abstract -----	1-3,5-8, 10
X	EP 0 454 097 A1 (NORAC TECHNOLOGIES) 30 October 1991 (1991-10-30) page 15, line 15 - line 31 claims 1,7,10-19 -----	5,6
X	US 2004/151792 A1 (TRIPP ET AL) 5 August 2004 (2004-08-05) paragraph [0107] paragraph [0141] paragraph [0153] paragraph [0173] claims 9,67,69 ----- -/--	4-6,9,10



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

26 August 2011

Date of mailing of the international search report

08/09/2011

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

Irwin, Lucy

# INTERNATIONAL SEARCH REPORT

International application No  
PCT/EP2010/061684

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 2005 179839 A (TORAY INDUSTRIES) 7 July 2005 (2005-07-07) abstract	4-6,9,10
A	----- EP 1 616 551 A1 (L'OREAL) 18 January 2006 (2006-01-18) example 2 paragraph [0030] paragraph [0024]	2,3,5-8
A	----- EP 1 925 214 A1 (DSM IP ASSETS) 28 May 2008 (2008-05-28) examples	2,3,5-8
A	----- GR 1 006 292 B2 (MOUZAKITIS) 9 March 2009 (2009-03-09) abstract -----	2,3,5-8

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/EP2010/061684

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
JP 2004307382 A	04-11-2004	NONE	
EP 0454097 A1	30-10-1991	AT 112141 T DE 69104257 D1 DE 69104257 T2 DK 0454097 T3 ES 2064798 T3 JP 3194984 B2 JP 4227680 A	15-10-1994 03-11-1994 24-05-1995 03-04-1995 01-02-1995 06-08-2001 17-08-1992
US 2004151792 A1	05-08-2004	NONE	
JP 2005179839 A	07-07-2005	NONE	
EP 1616551 A1	18-01-2006	NONE	
EP 1925214 A1	28-05-2008	CN 101562993 A EP 2099318 A1 WO 2008061755 A1 JP 2010510269 A KR 20090115850 A RU 2009123982 A US 2010048688 A1	21-10-2009 16-09-2009 29-05-2008 02-04-2010 09-11-2009 27-12-2010 25-02-2010
GR 1006292 B2	09-03-2009	NONE	