

(10) International Publication Number
WO 2012/139948 A3(43) International Publication Date
18 October 2012 (18.10.2012)

(51) International Patent Classification:

A61K 8/19 (2006.01) **A61Q 5/10** (2006.01)
A61K 8/368 (2006.01) **A61K 8/37** (2006.01)
A61Q 5/06 (2006.01)

(21) International Application Number:

PCT/EP20 12/056161

(22) International Filing Date:

4 April 2012 (04.04.2012)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

11162205.6 13 April 2011 (13.04.2011) EP

(71) **Applicant** (for AE, AG, AU, BB, BH, BW, BZ, CA, CY, EG, GB, GD, GH, GM, IE, IL, KE, KN, LC, LK, LS, MT, MW, MY, NA, NG, NZ, OM, PG, QA, RW, SC, SD, SG, SL, SZ, TT, TZ, UG, VC, ZA, ZM, ZW only): **UNILEVER PLC** [GB/GB]; Unilever House, 100 Victoria Embankment, London, Greater London EC4Y 0DY (GB).

(71) **Applicant** (for all designated States except AE, AG, AU, BB, BH, BW, BZ, CA, CY, EG, GB, GD, GH, GM, IE, IL, IN, KE, KN, LC, LK, LS, MT, MW, MY, NA, NG, NZ, OM, PG, QA, RW, SC, SD, SG, SL, SZ, TT, TZ, UG, US, VC, ZA, ZM, ZW): **UNILEVER N.V.** [NL/NL]; Weena 455, NL-3013 AL Rotterdam (NL).

(71) **Applicant** (for IN only): **HINDUSTAN UNILEVER LIMITED** [IN/IN]; Unilever House, B.D. Sawant Marg, Chakala, Andheri (East), Mumbai, Maharashtra 400 099 (IN).

(72) Inventors; and

(75) **Inventors/Applicants** (for US only): **AINGER, Nicholas, John** [GB/GB]; Unilever R&D Port Sunlight, Quarry Road East, Bebington, Wirral, Merseyside CH63 3JW (GB). **BATCHELOR, Stephen, Norman** [GB/GB]; Unilever R&D Port Sunlight, Quarry Road East, Bebington, Wirral, Merseyside CH63 3JW (GB). **BURNHAM, Neil, Stephen**

[GB/GB]; Unilever R&D Port Sunlight, Quarry Road East, Bebington, Wirral, Merseyside CH63 3JW (GB). **RILEY, Robert, George** [GB/GB]; Unilever R&D Port Sunlight, Quarry Road East, Bebington, Wirral, Merseyside CH63 3JW (GB).

(74) **Agent**: **TANSLEY, Sally, Elizabeth**; Unilever PLC, Unilever Patent Group, Colworth House, Sharnbrook, Bedford, Bedfordshire MK44 1LQ (GB).

(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, QA, RO, RS, RU, RW, 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, RW, 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:

11 July 2013

(54) Title: HAIR CARE COMPOSITION

(57) **Abstract**: A kit for colouring hair, comprising: (i) a first aqueous composition comprising iron, where the iron is present as a complex of gluconate and/or lactate; (ii) a second aqueous second composition, which comprises of a polyphenol selected from methyl gallate, ethyl gallate, propyl gallate or mixtures thereof.



WO 2012/139948 A3

INTERNATIONAL SEARCH REPORT

International application No
PCT/EP2012/056161

A. CLASSIFICATION OF SUBJECT MATTER		
INV. A61K8/19	A61K8/368	A61Q5/06 A61Q5/10 A61K8/37
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.
X	JP 2010 248103 A (SHISEI CHEMICAL KK) 4 November 2010 (2010-11-04) paragraphs [0042] - [0043] , [0049] -----	1-11
X	EP 0 327 345 A2 (BEECHAM GROUP PLC [GB]) 9 August 1989 (1989-08-09) cited in the application claims ; example 2 -----	1-11
X	W0 2010/148648 A1 (NATURAL MEDICINE INST OF ZHEJIANG YANGSHENG TANG CO LTD [CN] ; HU LIU [C] 29 December 2010 (2010-12-29) abstract; examples -----	1-11
A	JP 2006 348011 A (ESTATE CHEMICAL KK) 28 December 2006 (2006-12-28) abstract; examples -----	1-11
☐ 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 15 May 2013		Date of mailing of the international search report 23/05/2013
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 Mi l l e r, Bernhard

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/EP2012/056161

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
JP 2010248103	A	04-11-2010	NONE

EP 0327345	A2	09-08-1989	AU 2954289 A 10-08-1989
		DE 68909963 DI 25-11-1993	
		DE 68909963 T2 24-02-1994	
		DK 48789 A 05-08-1989	
		EP 0327345 A2 09-08-1989	
		ES 2060748 T3 01-12-1994	
		JP H01308218 A 12-12-1989	
		MA 21488 AI 01-10-1989	
		NZ 227843 A 21-12-1989	
		PH 25284 A 30-04-1991	
		PT 89596 A 04-10-1989	
		ZA 8900821 A 27-12-1989	
		ZM 889 AI 30-06-1989	
		ZW 1389 AI 18-10-1989	

WO 2010148648	AI	29-12-2010	CN 101926739 A 29-12-2010
			CN 102802595 A 28-11-2012
			EP 2446876 AI 02-05-2012
			JP 2012530727 A 06-12-2012
			KR 20120047914 A 14-05-2012
			US 2012132225 AI 31-05-2012
			WO 2010148648 AI 29-12-2010

JP 2006348011	A	28-12-2006	NONE
