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A61Q 5/10 (2006.01) *A61K 8/49* (2006.01)
A61K 8/34 (2006.01) *A61K 8/92* (2006.01)
A61K 8/38 (2006.01) *A61K 8/42* (2006.01)
A61K 8/39 (2006.01) *A61K 8/41* (2006.01)

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5 December 2013

(54) Title: DYE COMPOSITION USING A 2-HYDROXYNAPHTHALENE, PHENOL (ACYLAMINO)PHENOL OR QUINOLINE COUPLER IN A FATTY-SUBSTANCE-RICH MEDIUM, DYEING PROCESS AND DEVICE THEREFOR

(57) Abstract: The present invention relates to a cosmetic composition for dyeing keratin fibres, in particular human keratin fibres such as the hair, comprising: a) one or more fatty substances; b) one or more surfactants; c) one or more oxidation bases; d) one or more couplers based on 2-hydroxynaphthalene derivatives or particular phenol derivatives, acylaminophenol derivatives or quinoline derivatives; f) one or more basifying agents; e) optionally one or more chemical oxidizing agents; and the fatty substance content representing in total at least 25% by weight relative to the total weight of the formulation. The present invention also relates to a process using this composition, and to a multi-compartment device that is suitable for performing the said process.



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INTERNATIONAL SEARCH REPORT

International application No PCT/EP2012/057179

A. CLASSIFICATION OF SUBJECT MATTER				
INV. A61K8/31	A61Q5/10	A61K8/34		
A61K8/46	A61K8/49	A61K8/92		
ADD.	A61K8/38	A61K8/39		
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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, BIOSIS, CHEM ABS Data, EMBASE, FSTA, 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	FR 2 946 875 A1 (OREAL [FR]) 24 December 2010 (2010-12-24) sentence 1 - sentence 32 claims; examples -----	1-8, 16-27		
Y	EP 2 198 927 A2 (OREAL [FR]) 23 June 2010 (2010-06-23) paragraphs [0006] - [0011], [0014] - [0018]; examples -----	1-8, 16-27		
Y	WO 2010/070244 A2 (OREAL [FR]; SIMONET FREDERIC [FR]; CLEMENT FRANCK [FR]; AUDOUSSET MARI) 24 June 2010 (2010-06-24) page 2, line 2 - page 3, line 7; claims 1,10 -----	1-8, 16-27		
	----- -/--			
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.				
* Special categories of cited documents : <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none; vertical-align: top;"> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"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)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> </td> <td style="width: 50%; border: none; vertical-align: top;"> <p>"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</p> <p>"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</p> <p>"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</p> <p>"&" document member of the same patent family</p> </td> </tr> </table>			<p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"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)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p>	<p>"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</p> <p>"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</p> <p>"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</p> <p>"&" document member of the same patent family</p>
<p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"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)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p>	<p>"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</p> <p>"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</p> <p>"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</p> <p>"&" document member of the same patent family</p>			
Date of the actual completion of the international search	Date of mailing of the international search report			
10 May 2013	16/10/2013			
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 Krattinger, B			

INTERNATIONAL SEARCH REPORT

International application No

PCT/EP2012/057179

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	EP 1 757 328 A1 (OREAL [FR]) 28 February 2007 (2007-02-28) example 1 -----	1-8, 16-27
Y	EP 2 198 839 A1 (OREAL [FR]) 23 June 2010 (2010-06-23) paragraphs [0006] - [0012] -----	1-8, 16-27
Y	EP 2 198 840 A1 (OREAL [FR]) 23 June 2010 (2010-06-23) paragraphs [0005] - [0011] -----	1-8, 16-27
Y	EP 2 198 853 A1 (OREAL [FR]) 23 June 2010 (2010-06-23) paragraphs [0005] - [0012] -----	1-8, 16-27
Y	JP 2004 026703 A (HOYU KK) 29 January 2004 (2004-01-29) paragraph [0004] -----	1-8, 16-27
Y	DE 43 16 602 A1 (HENKEL KGAA [DE]) 24 November 1994 (1994-11-24) page 2, line 17 - line 47; examples -----	1-8, 16-27
Y	DE 10 2008 061864 A1 (HENKEL AG & CO KGAA [DE]) 21 October 2010 (2010-10-21) paragraphs [0001], [0002], [0005], [0006], [0054]; examples -----	1-8, 16-27
Y	FR 2 788 690 A1 (OREAL [FR]) 28 July 2000 (2000-07-28) page 1, line 26 - page 2, line 10; claim 1; examples -----	1-8, 16-27

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Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.
3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

7, 8(completely); 1-6, 16-27(partially)

Remark on Protest

- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 7, 8(completely); 1-6, 16-27(partially)

composition for dyeing fiber based on
2-hydroxynaphthalenes

2. claims: 9(completely); 1-6, 16-27(partially)

composition for dyeing fiber based on phenols of formula B1

3. claims: 10-13(completely); 1-6, 16-27(partially)

composition for dyeing fiber based on
acylaminophenols

4. claims: 14, 15(completely); 1-6, 16-27(partially)

composition for dyeing fiber based on quinolines

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/EP2012/057179

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
FR 2946875	A1	24-12-2010	NONE

EP 2198927	A2	23-06-2010	BR PI0906293 A2 30-04-2013
			CN 101744737 A 23-06-2010
			EP 2198927 A2 23-06-2010
			FR 2940105 A1 25-06-2010
			JP 2010143916 A 01-07-2010
			US 2010180389 A1 22-07-2010

WO 2010070244	A2	24-06-2010	CN 101951872 A 19-01-2011
			EP 2379048 A2 26-10-2011
			FR 2940079 A1 25-06-2010
			JP 2012512856 A 07-06-2012
			US 2010247465 A1 30-09-2010
			WO 2010070244 A2 24-06-2010

EP 1757328	A1	28-02-2007	AT 439168 T 15-08-2009
			DK 1757328 T3 14-12-2009
			EP 1757328 A1 28-02-2007
			EP 2156864 A2 24-02-2010
			ES 2330250 T3 07-12-2009
			FR 2889944 A1 02-03-2007
			PT 1757328 E 26-10-2009

EP 2198839	A1	23-06-2010	BR PI0907288 A2 07-05-2013
			CN 101791271 A 04-08-2010
			EP 2198839 A1 23-06-2010
			ES 2405268 T3 30-05-2013
			FR 2940101 A1 25-06-2010
			JP 2010143907 A 01-07-2010
			US 2010175203 A1 15-07-2010

EP 2198840	A1	23-06-2010	AT 555769 T 15-05-2012
			BR PI0906397 A2 30-04-2013
			CN 101791272 A 04-08-2010
			EP 2198840 A1 23-06-2010
			ES 2386106 T3 09-08-2012
			FR 2940061 A1 25-06-2010
			JP 2010143905 A 01-07-2010
			US 2010162493 A1 01-07-2010

EP 2198853	A1	23-06-2010	BR PI0908506 A2 07-05-2013
			CN 101744736 A 23-06-2010
			EP 2198853 A1 23-06-2010
			FR 2940100 A1 25-06-2010
			JP 2010143906 A 01-07-2010
			US 2010154142 A1 24-06-2010

JP 2004026703	A	29-01-2004	JP 4077669 B2 16-04-2008
			JP 2004026703 A 29-01-2004
			JP 2004026703 K1 29-01-2004

DE 4316602	A1	24-11-1994	AT 149344 T 15-03-1997
			DE 4316602 A1 24-11-1994
			DK 697854 T3 01-09-1997
			EP 0697854 A1 28-02-1996
			ES 2099613 T3 16-05-1997
			GR 3023486 T3 29-08-1997

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/EP2012/057179

Patent document cited in search report	Publication date	Patent family member(s)	Publication date

		WO 9426241 A1	24-11-1994

DE 102008061864 A1	21-10-2010	NONE	

FR 2788690 A1	28-07-2000	AU 3053400 A	07-08-2000
		CA 2323709 A1	27-07-2000
		EP 1066021 A1	10-01-2001
		FR 2788690 A1	28-07-2000
		JP 2002535263 A	22-10-2002
		US 6475247 B1	05-11-2002
		WO 0042980 A1	27-07-2000
