



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

<b>(51) International Patent Classification <sup>6</sup> :</b>  <b>A61K 7/06, 7/50</b>	<b>A3</b>	<b>(11) International Publication Number:</b> <b>WO 99/34768</b>  <b>(43) International Publication Date:</b> 15 July 1999 (15.07.99)
<b>(21) International Application Number:</b> PCT/EP99/00149 <b>(22) International Filing Date:</b> 6 January 1999 (06.01.99)  <b>(30) Priority Data:</b> 9800591.1      12 January 1998 (12.01.98)      GB  <b>(71) Applicant (for AU BB CA CY GB GH GM IE IL KE LC LK LS MN MW NZ SD SG SL SZ TT UG ZW only):</b> UNILEVER PLC [GB/GB]; Unilever House, Blackfriars, London EC4P 4BQ (GB).  <b>(71) Applicant (for all designated States except AU BB CA CY GB GH GM IE IL IN KE LC LK LS MN MW NZ SD SG SL SZ TT UG ZW):</b> UNILEVER N.V. [NL/NL]; Weena 455, NL-3013 AL Rotterdam (NL).  <b>(71) Applicant (for IN only):</b> HINDUSTAN LEVER LTD [IN/IN]; Hindustan Lever House, 165-166 Backbay Reclamation, Mumbai 400 020 (IN).  <b>(72) Inventors:</b> ISHIKAWA, Sachie; Nippon Lever B.V., Utsunomiya Factory, 38, Haga-dai, Haga-cho, Haga-gun, Tochigi-ken 321-33 (JP). KASAI, Masahiro; Nippon Lever B.V., Utsunomiya Factory, 38, Haga-dai, Haga-cho, Haga-gun, Tochigi-ken 321-33 (JP). SATO, Shin; Nippon		<b>Lever B.V., Utsunomiya Factory, 38, Haga-dai, Haga-cho, Haga-gun, Tochigi-ken 321-33 (JP).</b>  <b>(74) Agent:</b> GRIFFITHS, Helen, Sarah; Unilever plc, Patent Dept., Colworth House, Sharnbrook, Bedford MK44 1LQ (GB).  <b>(81) Designated States:</b> AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, 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, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).  <b>Published</b> <i>With international search report.</i>  <b>(88) Date of publication of the international search report:</b> 24 August 2000 (24.08.00)
<b>(54) Title:</b> HAIR CONDITIONING COMPOSITION  <b>(57) Abstract</b>  <p>A hair conditioning composition having improved wet stage conditioning performance comprising: (a) as a principal conditioning agent, an acid-neutralised amidoamine compound, wherein the amidoamine compound has general structural formula (I): R1 - C(O) - NH - R2 - N(R3)(R4); wherein R1 is a fatty acid chain containing from 12 to 22 carbon atoms, R2 is an alkylene group containing from one to four carbon atoms, and R3 and R4 are, independently, an alkyl group having from one to four carbon atoms, and (b) has an auxiliary conditioning agent, a silicone component which comprises a silicone gum with a viscosity greater than 1 Mcs, a silicone fluid with a viscosity of less than 100 kcs, and an amino functionalised silicone, and (c) an aqueous carrier.</p>		

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# INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 99/00149

<b>A. CLASSIFICATION OF SUBJECT MATTER</b> IPC 6    A61K7/06    A61K7/50				
According to International Patent Classification (IPC) or to both national classification and IPC				
<b>B. FIELDS SEARCHED</b> Minimum documentation searched (classification system followed by classification symbols) IPC 6    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)				
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>				
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.		
X	WO 95 23581 A (PROCTER & GAMBLE) 8 September 1995 (1995-09-08) claims 1-5,8 page 4, paragraph 3 - page 8, paragraph 3 page 11, paragraph 2 - page 12, paragraph 1 page 15, paragraph 3 page 20, paragraph 7 page 21, paragraph 4 page 26, paragraph 1 ---	1-10		
X	US 5 198 209 A (J.ZHOU, D.J.FOCHTMAN) 30 March 1993 (1993-03-30) claims 1,10,11,13,14,17-19 column 3, line 23 - column 4, line 2 column 7, line 17-24 -----	1-5,9		
<input type="checkbox"/> Further documents are listed in the continuation of box C. <span style="margin-left: 100px;"><input checked="" type="checkbox"/> Patent family members are listed in annex.</span>				
° Special categories of cited documents :				
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; 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 document 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%; 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>"&amp;" 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 document 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>"&amp;" 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 document 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>"&amp;" document member of the same patent family</p>			
Date of the actual completion of the international search  <div style="text-align: center; font-weight: bold;">22 July 1999</div>		Date of mailing of the international search report  <div style="text-align: center; font-weight: bold;">29/07/1999</div>		
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  <div style="text-align: center; font-weight: bold;">Peeters, J</div>		

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/EP 99/ 00149

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 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:  
**SEE FURTHER INFORMATION PCT/ISA/210**
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 II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

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

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 fee, this Authority did not invite payment of any additional fee.
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.:

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Claims 1 and 2 are dealing with physical parameters. As search on physical parameters is not possible, the search has been limited to the wording of the claims 1 and 2.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP 99/00149

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9523581 A	08-09-1995	AT 173609 T	15-12-1998
		AU 1883595 A	18-09-1995
		AU 9826898 A	04-03-1999
		BR 9506965 A	09-09-1997
		CA 2184169 A	08-09-1995
		CN 1149249 A	07-05-1997
		DE 69506234 D	07-01-1999
		DE 69506234 T	24-06-1999
		EP 0748204 A	18-12-1996
		ES 2126886 T	01-04-1999
		JP 9509930 T	07-10-1997
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US 5198209 A	30-03-1993	NONE	
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