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(54) Title: COMPOSITIONS CONTAINING HETEROPOLYMERS AND OIL-SOLUBLE ESTERS AND METHODS OF USING SAME

(57) Abstract: Structured compositions comprising at least one structuring polymer and at least one oil-soluble ester comprising at least one free hydroxy group. The compositions may also comprise at least one structuring polymer and at least one UV blocker. The at least one structuring polymer may be a polyamide polymer. This invention may be in the form of stable compositions such as, for example, make-up sticks, lipsticks, sunscreen sticks, anhydrous lip compositions, and anhydrous foundations.

INTERNATIONAL SEARCH REPORT

International Application No
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A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 A61K7/48 A61K7/027

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)
IPC 7 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, WPI Data, PAJ, CHEM ABS Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	GB 1 273 004 A (YARDLEY INC.) 3 May 1972 (1972-05-03) claims 1,6 page 2, line 33-40,75-96 examples 22-34	28,84, 92-96
X	US 3 148 125 A (MARK HAVASS ET AL) 8 September 1964 (1964-09-08) cited in the application claim 1 column 3, line 47-49 examples 1-4	28,84, 92-96
X	EP 0 797 976 A (UNILEVER PLC ;UNILEVER NV (NL)) 1 October 1997 (1997-10-01) examples 3,D-F page 7, line 42-48 page 8, line 7-18	28,84, 92,95,96
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Further documents are listed in the continuation of box C.

Patent family members are listed in 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

15 November 2002

Date of mailing of the international search report

Name and mailing address of the ISA

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INTERNATIONAL SEARCH REPORT

 International Application No
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 882 363 A (SPAULDING LAURA A ET AL) 16 March 1999 (1999-03-16) claims column 4, line 17 -column 5, line 30 ---	28,84, 92-96
X	US 5 874 069 A (CHEN HUIYONG PAUL ET AL) 23 February 1999 (1999-02-23) claims 1,11 column 19, line 56 -column 20, line 33	28,84, 92-96
X	column 4, line 41-50 column 7, line 7 column 8, line 10 ---	113,169, 170
X	WO 95 24887 A (MENNEN CO) 21 September 1995 (1995-09-21) examples VII-XI	28,84, 92,95,96
X	page 47, line 11-15 examples XIV-XVI ---	113,169, 170
P,X	EP 1 068 855 A (OREAL) 17 January 2001 (2001-01-17) claim 1 paragraphs '0013!', '0024! paragraph '0036!	28,84, 92-96
P,X	page 5, line 26 example 1 ---	113,169, 170
P,X	US 6 242 509 B1 (FRIHART CHARLES R ET AL) 5 June 2001 (2001-06-05) examples 54,55 column 6, line 44-57 ---	113,169, 170
E	WO 01 97758 A (COSMOLAB INC) 27 December 2001 (2001-12-27) examples 15,16 ---	28,84, 95,96, 113,169, 170
E	FR 2 816 506 A (BERNOUD THIERRY) 17 May 2002 (2002-05-17) claims page 2, line 20-26 examples 1-8 examples 2,8 page 13, line 1-6 ---	28,84, 92-96, 113,169, 170
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INTERNATIONAL SEARCH REPORT

International Application No

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
E	WO 02 47620 A (OREAL ;THAU PAUL (US); PINZON CARLOS O (US)) 20 June 2002 (2002-06-20) examples 1-3 claims -----	28,84, 92-96, 113,169, 170

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 01/47497

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 sheet 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:

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 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 Nos.: 28, 84, 92-96, 113, 169, 170 (all partially); 1-27, 29-83, 85-91, 97-112, 114-168, 171-177

In view of the large number and also the wording of the claims presently on file, which render it difficult, if not impossible, to determine the matter for which protection is sought, the present application fails to comply with the clarity and conciseness requirements of Article 6 PCT (see also Rule 6.1(a) PCT) to such an extent that a meaningful search is impossible.

Consequently, the search has been carried out for those parts of the application which do appear to be clear (and concise), namely

with regard to the first claimed subject:

compositions comprising at least one liquid fatty phase which comprises a polyamide as structuring polymer and an oil-soluble ester comprising a free hydroxy group, in particular those polyamide and ester components recited in the examples and in the description on p. 14, l. 1 - p. 15, l. 4 and p. 28, l. 18 - p. 29, l. 2, and closely related compounds,

with regard to the second claimed subject:

compositions comprising at least one liquid fatty phase which comprises a polyamide as a structuring polymer and an UV blocker; in particular those polyamide and UV blocker components recited in the examples and in the description on p. 14, l. 1 - p. 15, l. 4 and p. 38, l. 8 - p. 42, l. 27).

Thus, the present search covers

- claims 28, 84 and 92-96 (all partially),
- claims 113, 169, 170 (all partially).

The applicant's attention is drawn to the fact that claims, or parts of 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.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

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

1. Claims: 1-112

A composition comprising at least one liquid fatty phase which comprises:

- (i) at least one structuring polymer comprising at least one hydrocarbon-based monomer unit comprising a heteroatom, and
- (ii) at least one oil-soluble ester comprising at least one free hydroxy group,

a method for preparing a cosmetic composition by including a liquid fatty phase comprising (i) and (ii),

a method for providing resistance to shear and/or stability to a cosmetic composition by including a liquid fatty phase comprising (i) and (ii), and

a method for treating a keratinous material with the composition as defined above.

2. Claims: 113-177

A composition comprising at least one liquid fatty phase which comprises:

- (i) at least one structuring polymer comprising at least one hydrocarbon-based monomer unit comprising a heteroatom, and
- (ii) at least one UV blocker,

and

a method for providing resistance to shear and/or stability to a cosmetic composition by including a liquid fatty phase comprising (i) and (ii), wherein (i) is a polyamide.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 01/47497

Patent document cited in search report	Publication date	Patent family member(s)	Publication date	
GB 1273004	A	03-05-1972	DE 1930954 A1	08-01-1970
			FR 2014215 A5	17-04-1970
			JP 50010282 B	19-04-1975
			JP 48038861 B	20-11-1973
US 3148125	A	08-09-1964	NONE	
EP 0797976	A	01-10-1997	US 5667770 A	16-09-1997
			AU 725037 B2	05-10-2000
			AU 1641497 A	02-10-1997
			CA 2199683 A1	25-09-1997
			EP 0797976 A2	01-10-1997
			JP 10007527 A	13-01-1998
			NZ 314362 A	29-11-1999
			ZA 9702494 A	25-09-1998
US 5882363	A	16-03-1999	NONE	
US 5874069	A	23-02-1999	AT 225644 T	15-10-2002
			AU 2601197 A	22-10-1997
			CA 2249325 A1	09-10-1997
			DE 69716250 D1	14-11-2002
			EP 0891183 A1	20-01-1999
			WO 9736573 A1	09-10-1997
WO 9524887	A	21-09-1995	US 5500209 A	19-03-1996
			AT 208183 T	15-11-2001
			AU 1977795 A	03-10-1995
			CA 2185570 A1	21-09-1995
			DE 69523744 D1	13-12-2001
			DE 69523744 T2	08-08-2002
			DK 750491 T3	04-03-2002
			EP 0750491 A1	02-01-1997
			ES 2167421 T3	16-05-2002
			PT 750491 T	29-04-2002
			WO 9524887 A1	21-09-1995
			EP 1068855	A
FR 2796273 A1	19-01-2001			
AT 215807 T	15-04-2002			
BR 0003289 A	13-03-2001			
CN 1280817 A	24-01-2001			
DE 60000121 D1	16-05-2002			
DE 60000121 T2	19-09-2002			
EP 1068855 A1	17-01-2001			
JP 2001081320 A	27-03-2001			
US 6402408 B1	11-06-2002			
US 6242509	B1	05-06-2001	US 5783657 A	21-07-1998
			US 6111055 A	29-08-2000
			US 2002013444 A1	31-01-2002
			AU 727577 B2	14-12-2000
			AU 5147098 A	15-05-1998
			BR 9712342 A	31-10-2000
			EP 1027032 A1	16-08-2000
			JP 2002516619 T	04-06-2002
			AU 727433 B2	14-12-2000
			AU 5091998 A	15-05-1998

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 01/47497

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 6242509	B1	CN 1238678 A	15-12-1999
		EP 0939782 A1	08-09-1999
		JP 2001502742 T	27-02-2001
		TW 385321 B	21-03-2000
		US 5998570 A	07-12-1999
		WO 9817243 A1	30-04-1998
		WO 9817705 A1	30-04-1998
		US 6169160 B1	02-01-2001
WO 0197758	A	27-12-2001	US 6423324 B1
			AU 7507401 A
			WO 0197758 A2
FR 2816506	A	17-05-2002	FR 2816506 A1
WO 0247620	A	20-06-2002	US 2002111330 A1
			AU 5654302 A
			WO 0247620 A2