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(54) Title: HAIR CARE COMPOSITIONS COMPRISING SUCROSE POLYESTERS

(57) Abstract: A hair care composition having a conditioning active comprising a sucrose polyester having a melting point greater than about 30° C, an IBAR greater than about 5, an IV of about 3 to about 70, and an aqueous carrier, and may further comprise optional ingredients including but not limited to, silicone, cationic polymers, and fatty alcohols. The composition can also comprise a blend of sucrose polyesters, wherein the blend comprises two or more sucrose polyesters, wherein at least one sucrose polyester has a melting point greater than about 30° C, an IBAR greater than about 5, an IV of about 3 to about 70, and at least one sucrose polyester has an IBAR between about 1 and about 8, and an IV between about 1 and about 135, and wherein the sucrose polyester blend has an IBAR of at least 5 and an IV of about 1 and about 135.



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# INTERNATIONAL SEARCH REPORT

International application No  
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<b>A. CLASSIFICATION OF SUBJECT MATTER</b> INV. A61K8/34      A61K8/60      A61Q5/02      A61Q5/06      A61Q5/12		
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) 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 practical, search terms used) EPO-Internal, WPI Data		
<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	US 2007/110696 A1 (JOHNSON ERIC S [US] ET AL) 17 May 2007 (2007-05-17) paragraphs [0028], [0044]; claims; examples -----	1-6
X	WO 99/24003 A1 (PROCTER & GAMBLE [US]) 20 May 1999 (1999-05-20) page 3, paragraph 4 - page 5, paragraph 1; claims; examples -----	1-4
X	WO 02/17865 A1 (PROCTER & GAMBLE [US]; KOMURE NATSUMI [JP]; DULGUIME ULPIANO BONIFACIO) 7 March 2002 (2002-03-07) page 14, line 17 - line 28; claims; examples ----- -/--	1-6
<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 : *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		Date of mailing of the international search report
25 June 2009		15/10/2009
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  Donovan-Beermann, T

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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	WO 2006/045364 A1 (UNILEVER PLC [GB]; UNILEVER NV [NL]; LEVER HINDUSTAN LTD [IN]; MCMANUS) 4 May 2006 (2006-05-04) page 6 e) claims; example 3	1-3
P, X	WO 2008/063471 A2 (PROCTER & GAMBLE [US]; SCHWARTZ JAMES ROBERT [US]; JOHNSON ERIC SCOTT) 29 May 2008 (2008-05-29) the whole document	1-4, 6
A	WO 02/067880 A1 (UNILEVER PLC [GB]; UNILEVER NV [NL]; LEVER HINDUSTAN LTD [IN]) 6 September 2002 (2002-09-06) the whole document	1
A	EP 1 792 607 A1 (WELLA AG [DE]) 6 June 2007 (2007-06-06) paragraphs [0004], [0007]; claims; examples	1
P, A	ANONYMOUS: "Delivering Solutions, Creating Value". P & G CHEMICALS, [Online] XP002533982 Retrieved from the Internet: URL: <a href="http://www.pgchemicals.com/resources/pecsheets/ASIA-SEFOSE-031408.pdf">http://www.pgchemicals.com/resources/pecsheets/ASIA-SEFOSE-031408.pdf</a> [retrieved on 2009-06-25] the whole document	1

# INTERNATIONAL SEARCH REPORT

International application No.  
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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 allsearchable 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.:

1 - 6

### 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: 1-6

A hair care composition comprising:

- a) a conditioning active comprising a sucrose polyester having a melting point greater than about 30°C, an IBAR greater than about 5, preferably wherein the IBAR is between about 5 to about 8, an IV of about 3 to about 70;
  - b) a fatty alcohol having from about 14 to about 30 carbon atoms; and
  - c) an aqueous carrier.
- 

2. claims: 7, 8

A hair care composition comprising:

- a) a conditioning active comprising a sucrose polyester blend; wherein the blend comprises two or more sucrose polyesters,
    - i) at least one sucrose polyester has a melting point greater than about 30°C, an IBAR greater than about 5, an IV of about 3 to about 70, and
    - ii) at least one sucrose polyester has an IBAR between about 1 and about 8, and an IV between about 1 and about 135, and
    - iii) wherein the sucrose polyester blend has an IBAR of at least 5 and an IV of about 1 and about 135; and
  - b) an aqueous carrier.
- 

3. claims: 9-12

A hair care composition comprising:

- a) a conditioning active comprising a sucrose polyester having a melting point greater than about 30°C, an IBAR greater than about 5, and an IV of about 3 to about 70;
  - b) a cationic polymer; and
  - c) an aqueous carrier.
-

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

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