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(54) Title: PERSONAL CARE COMPOSITIONS COMPRISING SACCHARIDE-SILOXANE COPOLYMERS

(57) Abstract: A personal care composition comprising at least one saccharide-siloxane copolymer having a saccharide component and an organosiloxane component and linked by a linking group, wherein the saccharide-siloxane copolymer has a specified formula, is provided. The personal care composition is adapted to provide at least one benefit to the at least one portion of the body to which it is applied. Emulsions, methods for preparing emulsions comprising saccharide-siloxane copolymers, and personal care products comprising the personal care compositions and emulsions are also provided.



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## INTERNATIONAL SEARCH REPORT

International application No

PCT/US2006/020210

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>DATABASE CA [Online]            CHEMICAL ABSTRACTS SERVICE, COLUMBUS,            OHIO, US; 12 May 1989 (1989-05-12),            MURAOKA, TSUTOMU ET AL: "Hair preparations            containing organopolysiloxanes having            sugar substituents"            XP002402424            retrieved from STN            Database accession no. 1989:179250            abstract            &amp; JP 63 139106 A2 (KAO CORP., JAPAN)            10 June 1988 (1988-06-10)            -&amp; PATENT ABSTRACTS OF JAPAN            vol. 012, no. 391 (C-537),            18 October 1988 (1988-10-18)            &amp; JP 63 139106 A (KAO CORP),            10 June 1988 (1988-06-10)            abstract</p>	<p>1-8,            35-37,            40,41,            43,47-49</p>
X	<p>US 2003/202948 A1 (KOINI THOMAS ET AL)            30 October 2003 (2003-10-30)</p>	<p>1,6,            9-20,24,            26,28,            29,            35-41,            43,47,            48,50</p>
Y	<p>page 1, paragraph 13 - page 4, paragraph            75; claims; examples 1-11</p>	<p>33,34</p>
X	<p>US 6 066 326 A (AFRIAT ET AL)            23 May 2000 (2000-05-23)</p> <p>column 3, line 39 - column 5, line 61;            claims; examples 1-4</p>	<p>1,5,6,            9-18,            21-23,            35-41,            47,48,50</p>
Y	<p>EP 0 874 017 A (DOW CORNING S.A)            28 October 1998 (1998-10-28)            page 2, lines 4-47; examples</p>	<p>33,34</p>
Y	<p>EP 0 698 633 A (DOW CORNING CORPORATION)            28 February 1996 (1996-02-28)            column 1, line 55 - column 2, line 13;            example II            column 4, line 8 - column 5, line 5</p>	<p>33,34</p>
Y	<p>EP 0 363 252 A (L'OREAL)            11 April 1990 (1990-04-11)            page 6, line 27 - line 39; examples 6-9</p>	<p>33,34</p>
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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 2006/066227 A (DOW CORNING CORPORATION; GENENCOR INTERNATIONAL, INC; MCAULIFFE, JOSEP) 22 June 2006 (2006-06-22) page 1, line 13 - line 24; claims 1-12,38,41,42,49-52; examples 9-11 page 3, line 24 - page 4, line 9 page 5, line 7 - line 17 page 18, line 21 - page 20, line 3	1-44,50
E	WO 2006/071772 A (DOW CORNING CORPORATION; GENENCOR INTERNATIONAL, INC; JOFFRE, ERIC, JU) 6 July 2006 (2006-07-06) claims 1-7; table 1	1-8

# INTERNATIONAL SEARCH REPORT

International application No.  
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## Box 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 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 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.:

see annex

### 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

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

1. claims: 1-23, 35-44,47-50.

1.1 Claims 1-23, 35-43,47,48 directed to a personal care composition comprising at least one saccharide-siloxane copolymer having a saccharide component and an organosiloxane component and linked by a linking group, the copolymer being the reaction product of a functionalized organosiloxane polymer and at least one hydroxy-functional saccharide such that the organosiloxane component is covalently linked via the linking group.

Claim 44 directed to a method of styling and holding the hair by administering the personal care composition as recited in claim 1.

Claim 49 directed to a method of treating the hair with the personal care composition as recited in claim 1.

Claim 50 directed to a method of treating the skin with the personal care composition as recited in claim 1.

1.2. Claims 24-32 directed to an emulsion comprising: an internal phase, a surfactant and water, wherein the internal phase comprises pure or solubilized the saccharide-siloxane copolymer as recited in claim 1.

Claims 33-34 directed to a method for preparing the emulsion as recited in claim 24.

2. claims: 45-46

Claims 45-46 directed to an antiperspirant product comprising the personal composition as recited in claim 1, one antiperspirant salt, an amount of thickener.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/US2006/020210
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