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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: GLUCAN COMPOSITIONS

(57) Abstract: A cosmetic or pharmaceutical composition is provided comprising: a) 0.001 to less than 0.2 % by weight, based on the weight of the total composition, of a scleroglucan having a mean molecular weight of 1×10^6 to 12×10^6 ; b) a cosmetically or pharmaceutically acceptable carrier; and, optionally, c) lactic acid, a lactate and/or pentanediol. The composition shows advantageous effects, such as moisturization of skin or mucosa, and has an antiaging and revitalizing effect on the skin. When combined with a certain bactericide as explained in claim 1, compositions containing native polysaccharides of the glucan class in general, especially of the scleroglucan as of component a), are well suitable to reduce the number of bacteria in mucosal or oral environments and minimise adhesion, while retaining a pleasant feeling on the mucosa or gingiva. Plaque thus can be efficiently prevented or removed.



WO 2007/062995 A3

INTERNATIONAL SEARCH REPORT

International application No
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A. CLASSIFICATION OF SUBJECT MATTER

INV. A61Q11/00 A61Q19/08 A61K8/34 A61K8/365 A61K8/73
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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

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 1 317 916 A (NAT STARCH CHEM INVEST [US]) 11 June 2003 (2003-06-11) claims 1,10,11,13,14,21,22,26-30 pages 7-10; examples 1,2,12,17 -----	1-3
X	MEHVAR R.: "Dextrans for targeted and sustained delivery of therapeutic and imaging agents" JOURNAL OF CONTROLLED RELEASE, vol. 69, 2000, pages 1-25, XP002424549 Elsevier Science B.V. pages 8-10 page 16, paragraph 5.4 page 18, right-hand column page 3, paragraph 3.2 ----- -/-	1-3

☒ Further documents are listed in the continuation of Box C.

☒ 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
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- *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.
- *Z* document member of the same patent family

Date of the actual completion of the international search

14 March 2007

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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	DATABASE WPI Week 199704 Derwent Publications Ltd., London, GB; AN 1997-037974 XP002424551 HASHIMOTO T. ET AL: "Rapid action sustained release oral agent" & JP 08 295637 A (GREEN CROSS CORP) 12 November 1996 (1996-11-12) abstract -----	1,22
X	US 4 666 517 A1 (BAKAR SHAMSUL [US]) 19 May 1987 (1987-05-19) claims 1,10,12 examples V,VI -----	1,22
X	US 2005/196351 A1 (SOSHINSKY ANDRE [US]) 8 September 2005 (2005-09-08) claims 1,2,11,23 page 6, paragraph 108 page 10; example V -----	1,22
X	US 4 421 748 A1 (TRAGER SEYMOUR F [US] ET AL) 20 December 1983 (1983-12-20) claims 4-6 columns 3-4; example 1 -----	1,22
X	US 4 693 705 A1 (GERO ILONA B [US]) 15 September 1987 (1987-09-15) claim 6 -----	1,22
X	DE 100 34 491 A1 (SCS SKIN CARE SYSTEMS GMBH [DE]) 24 January 2002 (2002-01-24) claims 1,7,9 column 6; example V -----	1,22
X	EGGENSPERGER H ET AL: "SCHIZOPHYLLAN - EIN MULTIAKTIVES POLYSACCHARID SCHIZOPHYLLAN - A MULTI-ACTIVE POLYSACCHARIDE" SOFW-JOURNAL SEIFEN, OELE, FETTE, WACHSE, VERLAG FUR CHEMISCHE INDUSTRIE, AUGSBURG, DE, vol. 128, no. 1-2, 2002, pages 40-44, XP001247046 ISSN: 0942-7694 the whole document -----	1,11,22
X	US 3 659 025 A1 (HALLECK FRANK E) 25 April 1972 (1972-04-25) the whole document -----	1,11,22

INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP2006/068645

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, 4-5 (part), 6-8, 9-18 (part), 22

An antibacterial composition (...) characterized by containing

a) a glucan, and

b) a bactericide selected from (list);

Method for reducing the number of bacteria and/or minimise adhesion of bacteria in mucosal or oral environments (...), which method comprises contacting a composition according to claim 1 with the mucosa or oral tissue.

2. claims: 2, 4-5 (part), 9-18 (part), 19-21

Composition comprising

a) 0.001 to 0.2 %/w, relative to the weight of the total composition, of a scleroglucan of mean molecular weight 1.10(6th) to 12.10(6th),

b) a cosmetically or pharmaceutically acceptable carrier, and

c) a further component selected from lactic acid, lactate and 1,2-pentanediol (...);

Use of

a) a scleroglucan of mean molecular weight 1.10(6th) to 12.10(6th) in an amount of 0.005 to less than 0.05%/w, where amounts are /w relative to the weight of the total formulation, b) together with lactic acid, lactate and/or 1,2-pentanediol, c) and together with a cosmetically or dermatologically acceptable carrier for the preparation of a formulation for the treatment or prevention of (list of indications);

Process for the preparation of a cosmetic or dermatological formulation for the treatment or prevention of (list of indications), which process comprises addition of

a) 0.005 to less than 0.05%/w, relative to the weight of the total formulation, of a scleroglucan of mean molecular weight 1.10(6th) to 12.10(6th),

b) together with lactic acid, lactate and/or 1,2-pentanediol, to

c) a cosmetically or dermatologically acceptable carrier; A concentrate (...) characterized by containing

a) 0.3 to 3.0%/w relative to the weight of the total formulation, of a scleroglucan of mean molecular weight 1.10(6th) to 12.10(6th),

c) a cosmetically or dermatologically acceptable carrier, and

b) lactic acid or lactate or 1,2-pentanediol in a weight ratio relative to component (a) from the range 2:1 to 20:1.

3. claims: 3, 4-5 (part), 9-18 (part)

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Composition comprising

- a) 0.005 to less than 0.05%/w, relative to the weight of the total composition, of a scleroglucan of mean molecular weight 1.10(6th) to 12.10(6th), and
- b) a cosmetically or pharmaceutically acceptable carrier.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

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