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(54) Title: METHOD FOR COSMETIC TREATMENT OF KERATIN FIBERS

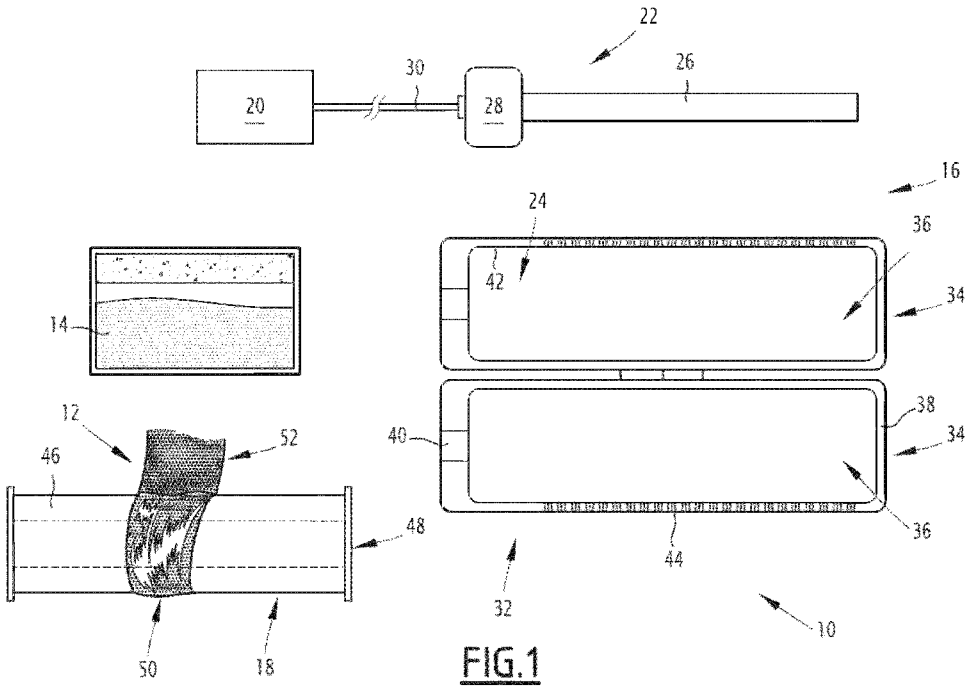


FIG.1

(57) Abstract: The invention relates to a method for cosmetic treatment of keratin fibers (12), preferably hair, said method comprising the following steps: a) applying an aqueous cosmetic composition (14) on the keratin fibers; then b) exposing said keratin fibers to a microwave radiation.

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[Continued on next page]

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Published:

— *with international search report (Art. 21(3))*

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP2024/065489

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 all searchable 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.:
1-7(completely); 28-32(partially)

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.

INTERNATIONAL SEARCH REPORT

International application No
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A. CLASSIFICATION OF SUBJECT MATTER

INV. A61K8/42 A61K8/43 A61Q5/04 A61Q5/06 A45D7/06
A61K8/40 A61K8/41 A61K8/44 A61K8/46
ADD.

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 A61Q A45F A45D

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 practicable, search terms used)

EPO-Internal, BIOSIS, Sequence Search, EMBASE, EMBL, INSPEC, CHEM ABS Data, SCISEARCH, 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	WO 2013/145330 A1 (OREAL [FR]; DE BONI MAXIME [JP]; TAKAHASHI HIROSHI [JP]) 3 October 2013 (2013-10-03)	1-5
Y	examples claims	1-7, 28-32

Y	WO 2011/141882 A1 (OREAL [FR]; GENAIN GILLES [FR] ET AL.) 17 November 2011 (2011-11-17) cited in the application example 12 claims	1-7, 28-32

Y	US 2006/108358 A1 (BELL CHRIS B [US]) 25 May 2006 (2006-05-25) paragraphs [0001] - [0017]; claims	1-7, 28-32

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[x] Further documents are listed in the continuation of Box C.

[x] 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

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"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
1 October 2024	09/12/2024

Name and mailing address of the ISA/	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Cismaru, L

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Form PCT/ISA/210 (second sheet) (April 2005)

INTERNATIONAL SEARCH REPORT

International application No
PCT/EP2024/065489

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2017/099925 A1 (VIC GABIN [FR] ET AL) 13 April 2017 (2017-04-13) paragraph [0577] claims	1-7, 28-32
Y	FR 2 991 558 A1 (OREAL [FR]) 13 December 2013 (2013-12-13) claims	1-7, 28-32

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/EP2024/065489

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2013145330 A1	03-10-2013	NONE	
WO 2011141882 A1	17-11-2011	BR 112012028628 A2	21-11-2017
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		WO 2013183021 A1	12-12-2013
FR 2991558 A1	13-12-2013	NONE	

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

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

1. claims: 1-7(completely); 28-32(partially)

A method for cosmetic treatment of keratin fibers (12), preferably hair, said method comprising the following steps:
a) applying an aqueous cosmetic composition (14) on the keratin fibers; then
b) exposing said keratin fibers to a microwave radiation;
the method being characterized in that the cosmetic composition includes at least one thiol and has a pH strictly lower than 6.

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2. claims: 8-15(completely); 28-32(partially)

A method for cosmetic treatment of keratin fibers (12), preferably hair, said method comprising the following steps:
a) applying an aqueous cosmetic composition (14) on the keratin fibers; then
b) exposing said keratin fibers to a microwave radiation;
the method being characterized in that the cosmetic composition (14) includes at least one compound of general formula (I), in a salified form or not, with (I):
R=C(NR1R2)(NR3R4)

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3. claims: 16-27(completely); 28-32(partially)

A method for cosmetic treatment of keratin fibers (12), preferably hair, said method comprising the following steps:
a) applying an aqueous cosmetic composition (14) on the keratin fibers, then
b) exposing said keratin fibers to a microwave radiation;
the method being characterized in that the cosmetic composition (14) includes at least one amine compound selected from among amino acids and/or alkanolamines, in a salified form or not and in that the pH of the cosmetic composition is higher than or equal to 9.
