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(54) Title: NON–IRRITATING COSMETIC AND PHARMACEUTICAL COMPOSITIONS

(57) Abstract

The present invention relates to a cosmetic or pharmaceutical emulsion for topical application to the skin comprising an irritating agent and at least one non–disruptive emulsifier. In a preferred embodiment the irritating agent is a retinoid. The invention also provides a method for decreasing the irritation on the skin caused by an irritating active agent in a topical cosmetic or pharmaceutical emulsion which comprises employing as an emulsifier at least one of an alkyl polyoside, a grafted water soluble protein on a hydrophobic backbone, and lecithin.

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INTERNATIONAL SEARCH REPORT

Intern. nal Application No
PCT/US 98/19803

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 A61K7/48 A61K7/50

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 6 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)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 96 07396 A (JOHNSON & JOHNSON CONSUMER PRODUCTS) 14 March 1996 see examples 7,8,8-II ---	1-3, 9-13,17, 20-23,26
X	WO 97 31620 A (JOHNSON & JOHNSON CONSUMER PRODUCTS) 4 September 1997 see examples 7,8,8-II,9-A, ---	1-3, 9-13,17, 20-23,26
X	EP 0 611 565 A (SHISEIDO) 24 August 1994 see examples 2-5 --- -/--	1,2, 9-12,17, 20-22

[X] Further documents are listed in the continuation of box C.

[X] Patent family members are listed in annex.

° Special categories of cited documents :

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"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
28 January 1999	25.06.99

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, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	FISCHER, J

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INTERNATIONAL SEARCH REPORT

Intern. ..nal Application No
PCT/US 98/19803

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 44 44 237 A (BEIERSDORF) 20 June 1996 see example 13	1,2,9, 10,12, 17,20,21
X	EP 0 439 042 A (F.HOFFMANN-LA ROCHE & CO) 31 July 1991 see examples 4,5,10	1,2,9, 10,12, 17,20,21
X	FR 2 403 800 A (GENIEYZ ET AL.) 20 April 1979 see claims 1,5,8-10; example 2	1,2, 9-12,17, 20-22
X	EP 0 330 496 A (BEECHAM GROUP) 30 August 1989 see example 3	1,2, 9-12,20, 21
A	FR 2 732 595 A (L'OREAL) 11 October 1996 see the whole document	1-33
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X,P	FR 2 754 713 A (ROC) 24 April 1998 see examples 4-B	1,2,5,6, 9-14, 17-23, 26-28
X,P	WO 97 46221 A (ROC) 11 December 1997 see examples D,E	1-3, 9-13,17, 20-23, 26,28

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 98/ 19803

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:

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.:

1-33 (all partially)

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

1. Claims 1-33 (all partially): A cosmetic or pharmaceutical emulsion for topical application to the skin comprising a retinoid as irritating agent and at least one non-disruptive emulsifier selected from the group consisting of alkyl polyosides, a grafted water soluble protein on a hydrophobic backbone, and lecithin.
2. Claims 1-33 (partially): A cosmetic or pharmaceutical emulsion for topical application to the skin comprising an alpha- or beta-hydroxy acid and derivatives thereof as irritating agent and at least one non-disruptive emulsifier selected from the group consisting of alkyl polyosides, a grafted water soluble protein on a hydrophobic backbone, and lecithin.
3. Claims 1-33 (partially): A cosmetic or pharmaceutical emulsion for topical application to the skin comprising Vitamin C and derivatives thereof as irritating agent and at least one non-disruptive emulsifier selected from the group consisting of alkyl polyosides, a grafted water soluble protein on a hydrophobic backbone, and lecithin.
4. Claims 1-33 (partially): A cosmetic or pharmaceutical emulsion for topical application to the skin comprising resorcinol as irritating agent and at least one non-disruptive emulsifier selected from the group consisting of alkyl polyosides, a grafted water soluble protein on a hydrophobic backbone, and lecithin.
5. Claims 1-33 (partially): A cosmetic or pharmaceutical emulsion for topical application to the skin comprising benzoyl peroxide as irritating agent and at least one non-disruptive emulsifier selected from the group consisting of alkyl polyosides, a grafted water soluble protein on a hydrophobic backbone, and lecithin.
6. Claims 1-33 (partially): A cosmetic or pharmaceutical emulsion for topical application to the skin comprising lactamides as irritating agent and at least one non-disruptive emulsifier selected from the group consisting of alkyl polyosides, a grafted water soluble protein on a hydrophobic backbone, and lecithin.
7. Claims 1-33 (partially): A cosmetic or pharmaceutical emulsion for topical application to the skin comprising quaternium lactates ammonium lactates as irritating agent and at least one non-disruptive emulsifier selected from the group consisting of alkyl polyosides, a grafted water soluble protein on a hydrophobic backbone, and lecithin.

Obscurities:
The expression "non disruptive emulsifier" does not represent a definition in structural terms of chemical compounds. As a consequence a complete search is virtually impossible for the subject matter of such claims. The same applies to the expression "a grafted water soluble protein on a hydrophobic backbone".
As a consequence a complete search for the subject matter of claims 1-33 is virtually impossible.
In view of the large number of compounds, which are defined in the claims, the search had to be restricted for economic reasons. The search was limited to the compounds specified in subject 1. of the non-unity objection, and to the general idea underlying the application. Even so, the search could only be performed in general terms, for reasons of economy.

Incomplete search:

Claims searchable completely: none
Claims searchable incompletely: 1-33
Claims not searchable: none

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
PCT/US 98/19803

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