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INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 :
A61K 7/48

A1

(11) International Publication Number: **WO 95/06458**

(43) International Publication Date: 9 March 1995 (09.03.95)

(21) International Application Number: PCT/EP94/02793

(22) International Filing Date: 23 August 1994 (23.08.94)

(30) Priority Data:
08/115,490 1 September 1993 (01.09.93) US

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(81) Designated States: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, UZ, VN, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG), ARIPO patent (KE, MW, SD).

Published
With international search report.

(54) Title: PETROLEUM JELLY CREAM

(57) Abstract

A cosmetic composition is described that includes an aqueous combination of petroleum jelly, aluminum starch octenylsuccinate and a C_{12}-C_{15} alkyl lactate. The composition provides petroleum jelly in a non-greasy but efficacious form to counteract skin dryness.

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PETROLEUM JELLY CREAM

The invention relates to a cosmetic emulsion based upon petroleum jelly.

Petroleum jelly is one of the oldest skin treatment products still in commerce today. For over 100 years, the Chesebrough Company and its successors have sold this substance under the brand, Vaseline®. There is good reason for the longevity of this product. Its occlusive and healing properties render this product especially efficacious against dry and damaged skin.

If petroleum jelly has any drawbacks, it undoubtedly involves the greasy nature of the substance. Petroleum jelly can rub off on clothes or anything else it comes into contact with.

The present invention provides a cosmetic composition comprising:

(i) petroleum jelly;

(ii) water;

(iii) aluminum starch octenylsuccinate; and

(iv) a C_{12}-C_{15} alkyl lactate.

Such a cosmetic composition may contain a substantial amount of petroleum jelly but is, nevertheless, relatively non-greasy.

Cosmetic compositions according to the present invention provide essentially the same moisturising, protecting and restoring properties against dry skin as would 100%

petroleum jelly and furthermore have good phase stability and pleasing aesthetics.

The present inventors have found that a combination of aluminum starch octenylsuccinate and an alkyl lactate can combine with an aqueous emulsion of petroleum jelly to obtain a non-greasy skin protective product.

Accordingly, the main hydrophobic component of the composition will be petroleum jelly. This substance will generally be present in an amount from at least 30% up to 95%, preferably between 30 and 50% by weight of the composition.

Water will suitably be present in an amount from 10 to 65%, preferably from 45 to 65% by weight.

Essential to the invention of removing the greasy aspect of petroleum jelly is the presence of aluminum starch octenylsuccinate, available under the trademark Dry-Flo® from the National Starch and Chemical Company, Bridgewater, New Jersey. The amount of this material may conveniently range from 1 to 10% by weight, optimally from 3.5 to 5% by weight of the composition.

A fourth essential component of cosmetic compositions according to the present invention is that of a C_{12}-C_{15} alkyl lactate. Amounts of the lactate will generally range from 0.1 to 10%, preferably from 3 to 8%, optimally from 4 to 6% by weight of the composition. The alkyl lactate is necessary in conjunction with the aluminum starch octenylsuccinate to achieve an adequate gliding feel for the product on the skin.

When combining Dry-Flo® into the cosmetic composition, it is preferable to add the material into the petroleum jelly and maintain the combination at a temperature between 38°C

and 100°C, preferably between 75°C and 80°C. This heat treatment allows the Dry-Flo® to undergo a controlled swelling which absorbs the petroleum jelly yielding the non-greasy effect.

Advantageously, cosmetic compositions of the present invention may also include a microcrystalline wax (in addition to any present naturally in the petroleum jelly). Amounts of the added microcrystalline wax may suitably range from 0.1 to 10%, preferably from 0.5 to 2%, optimally from 0.8 to 1.5% by weight of the composition. A preferred microcrystalline wax is Microwax 1275W/W 44®.

Beyond the aforementioned essential components, the cosmetic compositions of the present invention may also include other ingredients typically found in cosmetic formulations. Among these ingredients are emollients, solvents, humectants, thickeners, preservatives, fragrances and vitamins.

Emollients may be such materials as C_8-C_{30} fatty alcohols, C_8-C_{30} fatty acids, triglyceride oils, silicone oils and a variety of esters. Illustrative are stearyl alcohol, cetyl alcohol, stearic acid, isopropyl palmitate, isopropyl myristate, lanolin, sunflower oil, evening primrose oil, soybean oil, dimethyl polysiloxane and dimethyl polycyclosiloxane. Amounts of the emollient may typically range from 0.5 to 20% by weight of the composition. Most preferred is a mixture of stearyl alcohol and cetyl alcohol.

Solvents may include ethyl alcohol and isopropanol. Among the humectants may be included glycerin, diglycerin, sorbitol, ethylene glycol, polyethylene glycol, propylene glycol, polypropylene glycol and butylene glycol. Most preferred is a 1:1 mixture of glycerin and diglycerin.

Thickeners may be selected from such materials as crosslinked polyacrylates available under the Carbopol® trademark, celluloses such as sodium carboxymethylcellulose, hydroxyethylcellulose, hydroxypropylcellulose and methyl cellulose, and natural gums such as xanthan, carrageenan and pectin gums. Most preferred are the crosslinked polyacrylates, especially Carbopol 934® available from the B.F. Goodrich Company.

Powders may be such materials as chalk, talc, Fullers earth, kaolin, starch, colloidal silica, smectites clays, montmorillonite clays and chemically modified magnesium aluminum silicates.

Among the preservatives useful are methyl paraben, propyl paraben, EDTA salts, potassium sorbate, potassium benzoate and DMDM hydantoin.

Cosmetic compositions of the present invention may also contain vitamin ingredients such as Vitamin A palmitate, Vitamin E acetate, Niacin, Vitamin C and combinations thereof.

Emulsifiers could also be useful for purposes of the present invention. These emulsifiers may be alkoxylated C_8-C_{30} fatty acids and fatty alcohols. Examples of such materials are polyoxyethylene (4) lauryl ether, polyoxyethylene (8) monostearate, polyoxyethylene (10) cetyl ether and polyoxyethylene (20) stearyl ether. A particularly preferred emulsifier is Myreth-3-Myristate® available commercially as Cetiol 1414-E®.

In order that the invention may be well understood, the following examples are given by way of illustration only. All parts, percentages and proportions referred to herein and in the appended claims are by weight of the total composition unless otherwise stated.

EXAMPLES

Cosmetic emulsions according to the present invention are outlined in Examples 1-3 below.

Example 1

COMPONENT	WEIGHT %
Petroleum Jelly	30.0
Carbopol 934® (2% soln.)	15.0
Dry-Flo®	5.0
C_{12}-C_{15} Alkyl Lactate	5.0
Cetiol 1414-E®	3.5
Cetearyl Alcohol	2.4
Microwax 1275®	1.0
Glycerin	1.0
Diglycerin	1.0
Triethanolamine	0.8
Ethylene Brassylate	0.15
Glydant Plus®	0.1
Vitamin E Acetate	0.1
Disodium EDTA	0.05
Water	Balance

EXAMPLE 2

COMPONENT	WEIGHT %
Petroleum Jelly	30.0
Carbopol 934® (2% soln.)	8.0
Diethylene Glycol Dioctanoate	5.0
Dry-Flo®	5.0
C_{12}-C_{15} Alkyl Lactate	3.5
Cetiol 1414-E®	3.5
Glycerin	2.0
Microwax 1275®	1.0
Triethanolamine	0.6
Glydant Plus®	0.1
Disodium EDTA	0.05
Water	Balance

EXAMPLE 3

COMPONENT	WEIGHT %
Petroleum Jelly	40.0
Carbopol 934® (2% soln.)	8.0
Dry-Flo®	8.0
C_{12}-C_{15} Alkyl Lactate	2.0
Cetiol 1414-E®	1.5
Cetearyl Alcohol	1.3
Microwax 1275®	0.5
Glycerin	0.5
Diglycerin	0.5
Triethanolamine	0.4
Ethylene Brassylate	0.15
Glydant Plus®	0.1
Vitamin E Acetate	0.1
Disodium EDTA	0.01
Water	Balance

The foregoing description and Examples illustrate selected embodiments of the present invention. In light thereof, various modifications will be suggested to one skilled in the art, all of which are within the spirit and purview of this invention.

CLAIMS

1. A cosmetic composition comprising:

(i) petroleum jelly;
(ii) water;
(iii) aluminum starch octenylsuccinate; and
(iv) a C_{12}-C_{15} alkyl lactate.

2. A composition according to claim 1 wherein the petroleum jelly is present in an amount from 30 to 95% by weight.

3. A composition according to claim 1 or 2 wherein the water is present in an amount of from 10 to 65% by weight.

4. A composition according to any one of claims 1 to 3 wherein the aluminium starch octenylsuccinate is present in an amount of from 1 to 10% by weight.

5. A composition according to claim 4 wherein the aluminum starch octenylsuccinate is present in an amount between 3.5 and 5% by weight.

6. A composition according to any one of claims 1 to 5 wherein the alkyl lactate is present in an amount from 0.1 to 10% by weight.

7. A composition according to any one of claims 1 to 6 further comprising from 0.1 to 10% by weight of a microcrystalline wax in excess of any naturally present in the petroleum jelly.

8. A composition according to any one of claims 1 to 7 wherein the aluminum starch octenylsuccinate and petroleum jelly are combined together in forming the composition at a temperature between 38°C and 100°C.

INTERNATIONAL SEARCH REPORT

Internat | Application No
PCT/EP 94/02793

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 A61K7/48

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.
Y	US,A,3 852 475 (E.V. TARANGUL) 3 December 1974 see the whole document	1-8
Y	EP,A,0 262 681 (SCHERING CORPORATION) 6 April 1988 see the whole document	1-8
Y	EP,A,0 295 411 (SANSHO CO LTD) 21 December 1988 see claims; example 6	1-8

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

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Date of the actual completion of the international search	Date of mailing of the international search report
3 November 1994	17. 11. 94

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Form PCT/ISA/210 (second sheet) (July 1992)

INTERNATIONAL SEARCH REPORT

Information on patent family members

Internat : Application No
PCT/EP 94/02793

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