

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
29 June 2006 (29.06.2006)

PCT

(10) International Publication Number
WO 2006/067400 A1

(51) International Patent Classification:

A61K 8/73 (2006.01) A61Q 5/02 (2006.01)
A61Q 19/10 (2006.01) A61K 8/34 (2006.01)

(21) International Application Number:

PCT/GB2005/004893

(22) International Filing Date:

16 December 2005 (16.12.2005)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

0428247.1 23 December 2004 (23.12.2004) GB

(71) Applicant (for all designated States except US): **COSMETIC WARRIORS LTD** [GB/GB]; 29 High Street, Poole, Dorset BH15 1AB (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **AMBROSEN, Helen** [GB/GB]; 29 High Street, Poole, Dorset BH15 1AB (GB). **CONSTANTINE, Mark** [GB/GB]; 29 High Street, Poole, Dorset BH15 1AB (GB).

(74) Agent: **STURT, Clifford, Mark**; Miller Sturt Kenyon, 9 John Street, London WC1N 2ES (GB).

(81) Designated States (unless otherwise indicated, for every

kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every

kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

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.



WO 2006/067400 A1

(54) Title: COSMETIC PRODUCT COMPRISING A SEAWEED EXTRACT, IN PARTICULAR CARRAGEEN

(57) Abstract: The present invention resides in a cosmetic product comprising a surfactant, glycerine monopropylene glycol, and a seaweed extract.

COSMETIC PRODUCT COMPRISING A SEAWEED EXTRACT, IN PARTICULAR CARRAGEEN

The present invention relates to a cosmetic product particularly a cosmetic product having the form of a jelly.

It is known to produce cosmetic jellies by mixing a surfactant with an extract of seaweed. Such products have been sold commercially but have not been widely adopted, at least in part due to the properties of the jelly. That is, the known cosmetic jellies have a semi-liquid form and when, for example, applied to the human body with water they break down into the consistency of a lumpy paste.

The present invention seeks to improve upon the previously known cosmetic jellies.

According to a first aspect of the present invention there is provided a cosmetic product comprising a surfactant, glycerine and monopropylene glycol. Preferably the product also contains a seaweed extract such as carageen.

According to a second aspect of the present invention there is provided a method of forming a cosmetic product comprising the steps of selecting the components of the product to include a surfactant, glycerine and monopropylene glycol. Preferably the method also contains the step of selecting the components of the product to include a seaweed extract such as carageen.

The inventors hereof have discovered that the inclusion of monopropylene glycol, mixed with the glycerine, has a remarkable effect upon the consistency of the jelly, resulting in the jelly having a durable and almost rubber-like texture. The jelly is much firmer than a conventional jelly and readily holds a shape imparted to it, for example by moulding. These effects are all the more surprising when the jelly contains a seaweed extract, since it was thought that such an extract would be destabilised by the presence of glycerine and monopropylene glycol.

The jelly of the present invention is particularly useful as a cosmetic product because it does not readily break-down in the way that a conventional cosmetic jelly does. It is therefore particularly suitable for use as a shower gel or body wash, where it can be applied in

a somewhat similar fashion to a conventional bar of soap. The product is also suitable for use as, for example, a hair wash. Unlike the conventional cosmetic jellies, and conventional soap bars, the texture of the jelly of the present invention enables it to be torn; so that a small piece suitable for a single application is readily obtained. Indeed the jelly can be moulded in a shape which assists such tearing into individual applications.

The jelly of the present invention has the described semi-solid form at room temperature. It also has the advantage that it retains that form at reduced temperatures. That is, whereas a conventional cosmetic jelly placed in a domestic freezer and reduced to a temperature of say -18°C to -20°C becomes a frozen solid, the jelly of the present invention does not. Of course, glycol is known as an anti-freeze but it was none-the-less surprising that it resulted in the jelly of the present invention maintaining its durable rubber-like texture at temperatures of around -20°C . As an attribute of a cosmetic product such as a shower gel this feature is of considerable interest since it enables a "frozen" shower gel to be provided. The effect of applying the cold jelly to the human body in the presence of warm water, as in a shower, is very stimulating and invigorating. A conventional jelly when reduced to -20°C becomes frozen solid and is thus somewhat abrasive and harsh when applied to the human body. In contrast the jelly of the present invention, retaining its rubber-like texture at that temperature, does not suffer that disadvantage.

Embodiments of the present invention will now be described by way of further example only.

A cosmetic jelly according to an embodiment of the present invention is formed from the following components, percentages given by weight:-

Water	35%
Surfactant	30%
Glycerine	25%
Monopropylene Glycol	7%
Seaweed Extract	1.5%
Other (eg fragrance, preservative)	1.5%

The preferred range, by weight, of water among the components used to form a jelly according to the present invention is 15% to 45%.

The preferred range, by weight, of surfactant among the components used to form a jelly according to the present invention is 20% to 40%.

The preferred range, by weight, of glycerine among the components used to form a jelly according to the present invention is 10% to 35%.

The preferred range, by weight, of monopropylene glycol among the components used to form a jelly according to the present invention is 3% to 35%.

The preferred range, by weight, of seaweed extract among the components used to form a jelly according to the present invention is 1% to 3%.

A cosmetic jelly according to another embodiment of the present invention is formed from the following components, percentages given by weight:-

Water	35.3%
Surfactant	30.0%
Glycerine	25.0%
Monopropylene Glycol	7.0%
Seaweed Extract	1.5%
Fragrance	1.0%
Preservative	0.2%

In the embodiments given above the water can be replaced by any desirable infusion, for example an infusion of herbs and fruit juices.

As specific examples, the seaweed extract referred to in the embodiments may be carageen and the surfactant may be sodium laurate sulphide, sold under the trade name manec. Methylparaben, sold under the trade name nipagin, may be used as a preservative. Thus, a specific embodiment of the present invention is formed from the following groups of components, percentages given by weight:-

Group A

Water based infusion	37.5%
<u>Group B</u>	
Monopropylene Glycol	10.0%
Nipagin	0.2%
<u>Group C</u>	
Mannece	31.2%
<u>Group D</u>	
Glycerine	17.4%
Carageen	1.7%
<u>Group E</u>	
Fragrance	2.0%

The infusion of Group A may, for example, consist of (by weight) 31.5% water, 1% herb and 5% juice.

A method of forming a jelly according to the present invention and based upon the above stated groups of components is as follows:-

- (1) form the group A infusion
- (2) warm the group B components together so as to dissolve the nipagin
- (3) subsequently add together the group A, B and C components
- (4) heat to 80°C
- (5) add the group D components, which have been pre-mixed to make a paste
- (6) remove from heat and add the group E component

The above stated method is an example only. The method may be varied, especially dependent upon the specific components used. For example the step of heating to 80°C is considered to be required due to the inclusion of carageen. With the use of other forms of seaweed extract heating above room temperature may not be required at all.

In terms of the final product a particularly advantageous cosmetic jelly according to the present invention includes approximately 17% glycerine by weight of the final product and 10% monopropylene glycol by weight of the final product.

In terms of the final product, desirably a cosmetic jelly according to the present invention includes 10% to 35% glycerine by weight of the final product and 3% to 35% monopropylene glycol by weight of the final product.

Further desirably, a cosmetic jelly according to the present invention in terms of the final product includes 20% to 40% surfactant by weight of the final product.

Beneficially, a cosmetic jelly according to the present invention in terms of the final product includes 1% to 3% seaweed extract by weight of the final product.

It is to be noted that whereas the use of a seaweed extract such as carageen is recited above, it is considered that other natural gums, not necessarily seaweed extracts may achieve the same result.

Claims

1. A cosmetic product comprising a surfactant, glycerine and monopropylene glycol.
2. A cosmetic product as claimed in claim 1, further comprising a seaweed extract.
3. A cosmetic product as claimed in claim 1 or claim 2, wherein the percentage by weight of surfactant is 20% to 40%.
4. A cosmetic product as claimed in claim 1 or claim 2, wherein the percentage by weight of glycerine is 10% to 35%.
5. A cosmetic product as claimed in claim 1 or claim 2, wherein the percentage by weight of monopropylene glycol is 3% to 35%.
6. A cosmetic product as claimed in claim 2, wherein the percentage by weight of seaweed extract is 1% to 3%.
7. A cosmetic product as claimed in claim 1 or claim 2, comprising approximately 17% glycerine by weight of the final product and 10% monopropylene glycol by weight of the final product.
8. A cosmetic product as claimed in any preceding claim, further comprising a fragrance.
9. A cosmetic product as claimed in any preceding claim, further comprising a preservative.
10. A cosmetic product as claimed in any preceding claim, wherein the surfactant is sodium laurate sulphide.
11. A cosmetic product as claimed in claim 2, wherein the seaweed extract is carageen.
12. A cosmetic product as claimed in claim 9, wherein the preservative is methylparaben.

13. A cosmetic product as claimed in any preceding claim, further comprising one or more herbs and a fruit juice.

14. A method of forming a cosmetic product comprising the steps of selecting the components of the product to include a surfactant, glycerine and monopropylene glycol.

15. A method as claimed in claim 14, further comprising the step of selecting a seaweed extract as a component of the product.

16. A method as claimed in claim 14, further comprising the step of including water in the amount 15% to 45% by weight among the components selected to form the product.

17. A method as claimed in claim 14, further comprising the step of including the surfactant in the amount 20% to 40% by weight among the components selected to form the product.

18. A method as claimed in claim 14, further comprising the step of including the glycerine in the amount 10% to 35% by weight among the components selected to form the product.

19. A method as claimed in claim 14, further comprising the step of including the monopropylene glycol in the amount 3% to 35% by weight among the components selected to form the product.

20. A method as claimed in claim 15, further comprising the step of including the seaweed extract in the amount 1% to 3% by weight among the components selected to form the product.

21. A method as claimed in claim 14, further comprising the step of selecting the surfactant to be sodium laurate sulphide.

22. A method as claimed in claim 15, further comprising the step of selecting the seaweed extract to be carageen.

23. A method as claimed in claim 14, comprising the steps of selecting the components of the product to be, percentages given by weight:-

Water	35%
Surfactant	30%
Glycerine	25%
Monopropylene Glycol	7%
Seaweed Extract	1.5%
Other components	1.5%

24. A method as claimed in claim 23, comprising the step of selecting the said other components to include at least one of a fragrance and a preservative.

25. A method as claimed in claim 14, comprising the steps of selecting the components of the product to be, percentages given by weight:-

Water	35.3%
Surfactant	30.0%
Glycerine	25.0%
Monopropylene Glycol	7.0%
Seaweed Extract	1.5%
Fragrance	1.0%
Preservative	0.2%

26. A method as claimed in any of claims 23 to 25, further comprising substituting a water based infusion for the said water.

27. A method as claimed in claim 14, comprising the steps of selecting the components of the product to be the following groups of components, percentages given by weight:-

Group A

Water based infusion	37.5%
----------------------	-------

Group B

Monopropylene Glycol	10.0%
Methylparaben	0.2%

Group C

Sodium laurate sulphide	31.2%
-------------------------	-------

Group D

Glycerine	17.4%
Carageen	1.7%

Group E

Fragrance	2.0%
-----------	------

28. A method as claimed in claim 26 or claim 27, further comprising the step of selecting the infusion to contain a herb, a juice and water.
29. A method as claimed in claim 27, further comprising the following steps:-
- (1) forming the group A infusion
 - (2) warming the group B components together so as to dissolve the methylparaben
 - (3) subsequently adding together the group A, B and C components
 - (4) heating the added together group A, B and C components
 - (5) adding the group D components, which have been pre-mixed to make a paste
 - (6) removing from heat and add the group E component.

INTERNATIONAL SEARCH REPORT

International application No
PCT/GB2005/004893

A. CLASSIFICATION OF SUBJECT MATTER A61K8/73 A61Q19/10 A61Q5/02 A61K8/34		
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, CHEM ABS Data		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 571 503 A (MAUSNER ET AL) 5 November 1996 (1996-11-05) table II -----	1-29
X	DATABASE WPI Section Ch, Week 200158 Derwent Publications Ltd., London, GB; Class B04, AN 2001-528173 XP002375126 & KR 2001 026 620 A (HONG S G) 6 April 2001 (2001-04-06) abstract -----	1, 2, 8, 11, 14, 15, 22
X	JP 2001 039843 A (KAO CORP.) 13 February 2001 (2001-02-13) table 1 -/--	1, 2, 5, 6, 11, 14, 15, 19, 20, 22
<input checked="" type="checkbox"/>	Further documents are listed in the continuation of Box C.	<input checked="" type="checkbox"/> 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		"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
"E" earlier document but published on or after the international filing date		"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
"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)		"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.
"O" document referring to an oral disclosure, use, exhibition or other means		"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed		
Date of the actual completion of the international search 31 March 2006		Date of mailing of the international search report 24/04/2006
Name and mailing address of the ISA/ 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		Authorized officer Sierra Gonzalez, M

INTERNATIONAL SEARCH REPORT

International application No

PCT/GB2005/004893

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 Section Ch, Week 200137 Derwent Publications Ltd., London, GB; Class D21, AN 2001-347566 & JP 2001 039843 A (KAO CORP) 13 February 2001 (2001-02-13) abstract -----	1,2,5,6, 11,14, 15,19, 20,22
A	R. WINTER: "A consumer's dictionary of cosmetic ingredients" 1999, THREE RIVERS PRESS, NEW YORK, XP002375122 page 112, last paragraph -----	1-29

INTERNATIONAL SEARCH REPORT
information on patent family members

International application No
PCT/GB2005/004893

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5571503	A	05-11-1996	NONE
KR 2001026620	A	06-04-2001	NONE
JP 2001039843	A	13-02-2001	NONE