

Señor

SUPERINTENDENTE DE INDUSTRIA Y COMERCIO
DIVISION DE NUEVAS CREACIONES

E. _____ S

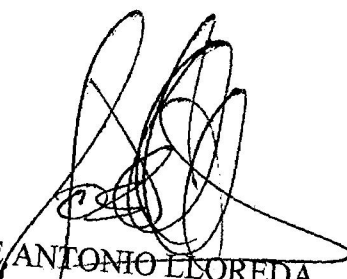
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SUPERINDUSTRIA Y COMERCIO
Radicacion : 00049307 00000001 Folios: 37
Fecha (AMD): 2000-08-22 15:37:38
Tramite : 002 PATENTES D 1 REGISTRO/ 329 COMPLETOS
Dependencia: 2020 DIVISION DE NUEVAS CREACIONES

Re: P1.-UNILEVER NV .- Solicitud de Patente de Invención para
“COMPOSICIONES PARA EL ACONDICIONAMIENTO DE LAS
TELAS”.- Clase D06.-Expediente número 00-049.307.-

1. Me refiero a mi solicitud de patente de fecha 30 de Junio de 2000.
2. Anexos me permito presentar a usted:
 - (1) Copia autentica, debidamente certificada de la solicitud de patente presentada para el invento arriba nombrado **respecto de la cual reclamo prioridad**, a saber la solicitud británica número 9915964.2 [✓] de 7 de Julio de 1999, junto con su traducción correspondiente a las legalizaciones y reivindicaciones de dicho documento;
 - (2) Copia debidamente autenticada por el Notario Sexto del Circulo de Bogotá, de los documentos que acreditan la calidad de Traductor Oficial de la señora María Luisa Brigard de Restrepo quien elaboró la traducción de la legalizaciones de la solicitud británica número 9915964.2 de 7 de Julio de 1999;
 - (3) Documentos que acreditan el traspaso que la sociedad UNILEVER PLC hace a favor de mi poderdante, de sus derechos sobre el mismo, debidamente legalizados hasta por el Ministerio de Relaciones Exteriores de Colombia bajo el número 296641 de 13 de Julio de 2000; y
 - (4) Traducción Oficial No. 187, debidamente legalizada hasta por el Ministerio de Relaciones Exteriores de Colombia bajo el número 298559 de 17 de Julio de 2000, correspondiente a las partes pertinentes de dicho documento de traspaso.

3. Ruego a usted tomar atenta nota de lo anterior y proceder de conformidad.

Señor Superintendente,



JOSE ANTONIO LLOREDA

T.P. 10.784

Código 231

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REPUBLICA DE COLOMBIA
MINISTERIO DE RELACIONES EXTERIORES

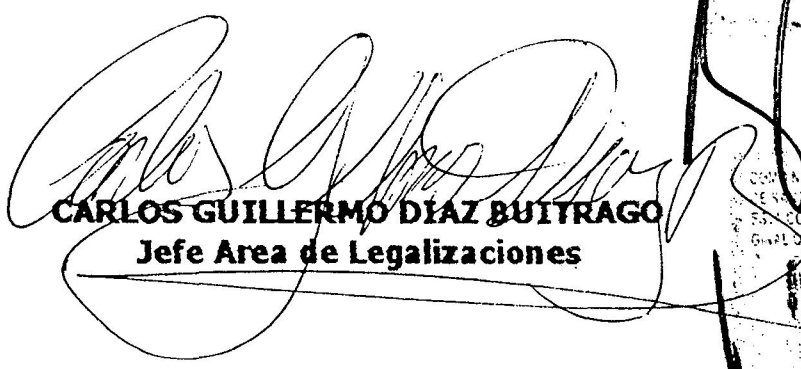
**EL SUSCRITO JEFE DEL AREA DE
LEGALIZACIONES DEL MINISTERIO DE
RELACIONES EXTERIORES**

CERTIFICA

Que revisados los registros que se llevan en la oficina de Legalizaciones aparece la firma de la señora **MARIA LUISA DE BRIGARD DE RESTREPO**, como traductora e intérprete oficial para los idiomas **INGLES - ESPAÑOL, ESPAÑOL-INGLES**, según resolución 0793 del 21 de marzo de 1958

La anterior certificación se expide a solicitud de la interesada quien se identificó con cédula de ciudadanía No. 20.024.691 expedida en Santa Fe de Bogotá

Dada en Santa Fe de Bogotá, D.C. a los veinticinco (25) días de marzo de 1999


CARLOS GUILLERMO DIAZ BUITRAGO
Jefe Area de Legalizaciones

PABLO MENDEZ ESPINOSA

13 ABR 1999

PABLO MENDEZ ESPINOSA

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TRADUCCION OFICIAL No. 5.737

de un documento escrito en INGLES, el cual para su identificación se sella con el sello del Traductor al mismo tiempo que la presente. -

Oficina de Patentes

Solicitud de otorgamiento de una patente

TRADUCCION OFICIAL No. 5.737
Oficina de Patentes
Oficina de Patentes
Interés del Reino Unido
Cardiff Road
Newport
Gwent NP9 1RH

- | | | |
|----|---|---|
| 1. | Su referencia | C3940 (C)/pmk |
| 2. | Número de solicitud de patente | 7 DE JULIO DE 1999 9915964.2 |
| 3. | Nombre completo, dirección y código postal de cada solicitante | UNILEVER PLC
UNILEVER HOUSE, BLACKFRIARS
LONDRES, EC4P-4BQ |
| | Número de ADP de Patentes | 1624002 |
| | Si el solicitante es una entidad corporativa, dar el condado/estado de constitución | REINO UNIDO |
| 4. | Título de la invención | COMPOSICIONES ACONDICIONADORAS DE TELAS |
| 5. | Nombre de su agente | ELLIOTT, Peter William |

"Dirección para entrega de comunicaciones" en el Reino Unido a la cual debe enviarse toda la correspondencia (incluyendo el código postal)

DEPARTAMENTO DE PATENTES,
UNILEVER PLC
COLWORTH HOUSE, SHARNBROOK
BEDFORD, MK44 1LQ

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TRADUCCIÓN OFICIAL No. 5.737
Berta Luisa Bergard de Roldán
Intérprete Oficial
del B.O. de J. de J. de J.

Número de ADP de Patentes

- | | | | | |
|----|--|---------------------------------|---|-------------------------------------|
| 6. | Si ustedes están declarando prioridad con base en una o varias solicitudes de patente anteriores, dé el país y la fecha de presentación de cada una de esas solicitudes anteriores y (si lo sabe) el número de cada una. | País | Número de Solicitud de Prioridad (si lo sabe) | Fecha de Presentación (día/mes/año) |
| 7. | Si esta solicitud es dividida o derivada en otra forma de una solicitud del R.U. anterior, dar el número y la fecha de presentación de la solicitud anterior. | Número de la Solicitud anterior | | Fecha de Presentación (día/mes/año) |
| 8. | Se necesita una declaración de carácter de inventor y derecho de otorgamiento de una patente en soporte de esta solicitud? (responda "Sí" en el caso de que: | SI | | |
| | a) algún solicitante mencionado en la parte 3 no es un inventor, o | | | |
| | b) hay un inventor que no esté mencionado como un solicitante, o | | | |
| | c) algún solicitante mencionado es una entidad corporativa. | | | |
| 9. | Anoten el número de hojas de cualquiera de los siguientes items que ustedes están presentando con este formulario. No tengan en cuenta las copias del mismo documento. | | | |

Hojas de continuación de este formulario

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Descripción	33
Reivindicaciones	3
Extracto	1
Dibujo(s)	

10. Si ustedes están presentando también alguno de los siguientes documentos, especifiquen cuántos al frente de cada ítem.

Documentos de prioridad

Traducciones de documentos de prioridad

Declaración de carácter de inventor y derecho de otorgamiento de una patente (Formulario de Patentes 7/77)

Solicitud de examen e investigación preliminar ((Formulario de Patentes 9/77) 1

Solicitud de examen sustantivo (Formulario de Patentes 10/77)

Cualesquiera otros documentos	Hoja de Derechos
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TRADUCCIÓN OFICIAL No. 5.737
[Firma]
 María Luisa Brizuela de Restrepo
 Intérprete Oficial
 del M. P. de la M. de Justicia

11. Solicitamos el otorgamiento de una patente sobre la base de esta solicitud.

Firma (Firma)	Fecha 7 de julio de 1999
---------------	--------------------------

Sandra Jane EDWARDS, Firmante Autorizada

12. Nombre y número de teléfono durante el día de la persona con quien ha de comunicarse en el Reino Unido **Petra Kimber, Tel. 01234 222893**

ANEXO:

Oficina de Patentes

Oficina de Patentes
Concept House
Cardiff Road
Newport
South Wales
NP10 8QQ

Yo, el suscrito, funcionario debidamente autorizado de conformidad con la Sección (4) de la Ley de Deregulation & Contracting Out de 1994 para firmar y expedir certificados en nombre del Contralor General, certifico por el presente que anexa aquí se encuentra una copia fiel de los documentos presentados originalmente en relación con la solicitud de patente identificada allí.

De conformidad con las Reglas de Patentes de 1982 (Nuevo Registro de Compañías), si una compañía mencionada en este certificado y en cualesquiera documentos adjuntos se ha vuelto a registrar según la Ley de Compañías de 1980 con el mismo nombre con el que estaba registrada antes del nuevo registro con excepción de la sustitución o inclusión como la última parte del nombre de las palabras "public limited company" o sus equivalentes en Galés, las referencias al nombre de la compañía en este certificado y en cualesquiera documentos adjuntos, se considerarán como referencias al nombre con el cual se ha vuelto a registrar así.

De conformidad con las reglas, las palabras "public limited company" pueden ser reemplazadas con p.l.c., plc, P.L.C. o PLC.

El nuevo registro en virtud de la Ley de Compañías no constituye una entidad legal nueva sino que solamente sujeta a la compañía a ciertas reglas adicionales de la ley de compañías.

Firmado

Fechado el 21 DE JUNIO DEL 2000

Sello.

Una Agencia Ejecutiva del Departamento de Industria y Comercio

ANEXO:

C3940 (C)

MANEJO OFICIAL No. 5.737
Marta Luisa Brizuela de Restrepo
Intendente Oficial
No. 0702 del Min. de Justicia

REIVINDICACIONES

1. Una composición acondicionadora de telas acuosa que comprende:
 - (i) uno o varios agentes activos de superficie escogidos entre:
 - (a) compuestos de amonio cuaternario que tienen al menos un grupo éster y son formados a partir de un ácido graso inicial que tiene un grado de insaturación representado por un valor de yodo comprendido entre 20 y 140, y
 - (b) compuestos de amonio cuaternario que tienen dos cadenas alquilo o alquenilo C_8-C_{28} unidas directamente al nitrógeno y son formados a

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partir de un ácido graso inicial que tiene un grado de insaturación representado por un valor de yodo comprendido entre 0 y 20, y

(ii) uno o varios aceites,

(iii) uno o varios disolventes,

estando la composición en la forma de una micro-emulsión.

- PAT. OFICIAL No. 5.737
Maria Luisa Brizuela de Restrepo
Interprete Oficial
del Min. de Justicia
2. Una composición acondicionadora de telas acorde con la reivindicación 1 que comprende desde 10% hasta 60% por peso, preferiblemente 20-55% por peso, más preferiblemente 24-51% por peso, del agente activo de superficie catiónico, con base en el peso total de la composición.
 3. Una composición acondicionadora de telas acorde con cualquiera de las reivindicaciones 1 o 2 en la que la relación de peso entre el agente activo de superficie y el aceite es de 5:1 a 1:10, preferiblemente de 4:1 a 1:5, más preferiblemente de 3:1 a 1:3.
 4. Una composición acondicionadora de telas acorde con cualquiera de las reivindicaciones que anteceden, en la que el aceite es un aceite de éster o un aceite mineral.
 5. Una composición acondicionadora de telas acorde con cualquiera de las

reivindicaciones que anteceden, en la que el aceite está presente en una cantidad de 10 a 70% por peso, preferiblemente de 12 a 60% por peso, más preferiblemente de 15 a 52% por peso, con base en el peso total de la composición.

6. Una composición acondicionadora de telas acorde con cualquiera de las reivindicaciones que anteceden, en la que el disolvente es un alcohol que tiene un peso molecular de 120 o menos.

5.737
TRANSMISION. OFICIAL
Maria Luisa Brizuela de Restrepo
Intendente Oficial
MA 0703 del 01 de Junio

7. Una composición acondicionadora de telas acorde con cualquiera de las reivindicaciones que anteceden, en la que el disolvente está presente en una cantidad de 0,05 a 25% por peso, preferiblemente de 0,1 a 20% por peso, más preferiblemente de 0,15 a 16% por peso, con base en el peso total de la composición.
8. Una composición acondicionadora de telas acorde con cualquiera de las reivindicaciones que anteceden, que comprende además un auxiliar de dispersión.
9. Una composición acondicionadora de telas acorde con cualquiera de las reivindicaciones que anteceden, en la que el auxiliar de dispersión es un alcohol graso alcoxilado.
10. Una composición acondicionadora de telas acorde con cualquiera de las reivindicaciones 8 o 9, en la que el auxiliar de dispersión está presente en una cantidad de 0,05 a 25% por peso, preferiblemente de 0,1 a 16% por peso, más preferiblemente de 0,15 a 10% por peso, con base en el peso total de la composición.

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11. Una composición acondicionadora de telas acorde con cualquiera de las reivindicaciones 8 o 9, en la que el auxiliar de dispersión actúa también como un estabilizador para la composición de micro-emulsión.
 12. Un procedimiento para acondicionar telas que comprende el paso de agregar a una operación de lavandería la composición acondicionadora de telas reivindicada en cualquiera de las reivindicaciones precedentes.
 13. Un procedimiento acorde con la reivindicación 12 que comprende introducir directamente en una máquina de lavar una dosis de la composición en forma no diluida.
 14. Un procedimiento acorde con la reivindicación 12 que comprende diluir la composición antes de usarla.
 15. Un método para preparar una composición acondicionadora de telas, que consiste en mezclar al menos un agente activo de superficie, al menos un aceite, un disolvente y agua y agitar o bien calentar la mezcla para formar una micro-emulsión.

ES TRADUCCION FIEL Y COMPLETA, de la cual queda copia en los archivos de esta oficina de traducciones, para su confrontación y a la que me remito.

Derechos de Traducción: \$72.000,00

BOGOTA, 17 DE JULIO DEL 2000.

TRADUCCION OFICIAL No. 5.737
Maria Luisa Briger de Restrepo
Maria Luisa Briger de Restrepo
Intérprete Oficial
C.C. No. 0752 del Min. de Justicia

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JOSE LLORENTE SANCHEZ & CO.



INVESTOR IN PEOPLE

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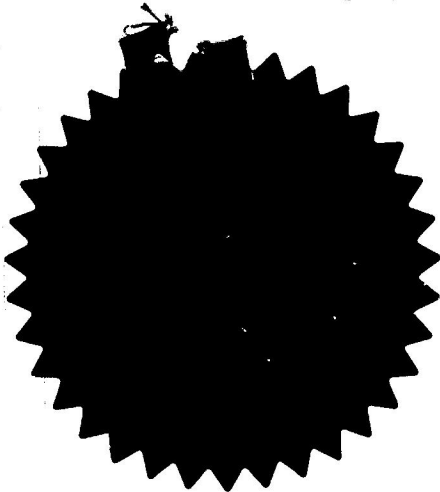
The Patent Office
Concept House
Cardiff Road
Newport
South Wales
NP10 8QQ

I, the undersigned, being an officer duly authorised in accordance with Section 74(1) and (4) of the Deregulation & Contracting Out Act 1994, to sign and issue certificates on behalf of the Comptroller-General, hereby certify that annexed hereto is a true copy of the documents as originally filed in connection with the patent application identified therein.

In accordance with the Patents (Companies Re-registration) Rules 1982, if a company named in this certificate and any accompanying documents has re-registered under the Companies Act 1980 with the same name as that with which it was registered immediately before re-registration save for the substitution as, or inclusion as, the last part of the name of the words "public limited company" or their equivalents in Welsh, references to the name of the company in this certificate and any accompanying documents shall be treated as references to the name with which it is so re-registered.

In accordance with the rules, the words "public limited company" may be replaced by p.l.c., plc, P.L.C. or PLC.

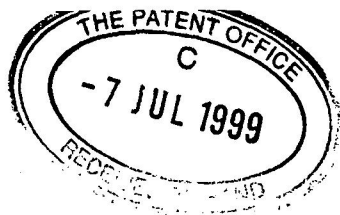
Re-registration under the Companies Act does not constitute a new legal entity but merely subjects the company to certain additional company law rules.



Signed

Dated

21 JUN 2000

The
Patent
Office06JUL99 2460526-5 0008921
P01/TT00 0.00 - 7915544.1

The Patent Office

Cardiff Road
Newport
Gwent NP10 8QQ**Request for grant of a patent**(See the notes on the back of this form. You can also get
an explanatory leaflet from the Patent Office to help
you fill in this form)

1.	Your reference	C3940 (C)/pmk		
2.	Patent application number (The Patent Office will fill in this part)	07 JUL 1999	9915964.2	
3.	Full name, address and postcode of the or of each applicant (underline all surnames)	UNILEVER PLC UNILEVER HOUSE, BLACKFRIARS LONDON, EC4P 4BQ 1625002 ✓		
	Patents ADP number (if you know it)			
	If the applicant is a corporate body, give the country/state of its incorporation	UNITED KINGDOM		
4.	Title of the invention	FABRIC CONDITIONING COMPOSITIONS 5.737		
5.	Name of your agent (if you have one)	ELLIOTT, Peter William		
	"Address for Service" in the United Kingdom to which all correspondence should be sent (including the postcode)	PATENT DEPARTMENT, UNILEVER PLC COLWORTH HOUSE, SHARNBROOK BEDFORD, MK44 1LQ 1625003 ✓		
	Patents ADP number (if you know it)			
6.	If you are declaring priority from one or more earlier patent applications, give the country and the date of filing of the or of each of these earlier applications and (if you know it) the or each application number	Country	Priority application number (if you know it)	Date of filing (day / month / year)
7.	If this application is divided or otherwise derived from an earlier UK application, give the number and the filing date of the earlier application	Number of earlier application	Date of filing (day/month/year)	
8.	Is a statement of inventorship and of right to grant of a patent required in support of this request? (Answer 'Yes' if: a) any applicant named in part 3 is not an inventor, or b) there is an inventor who is not named as an applicant, or c) any named applicant is a corporate body. See note (d))	YES		

Patents Form 1/77

9. Enter the number of sheets for any of the following items you are filing with this form. Do not count copies of the same document

Continuation sheets of this form

Description **33**

Claim(s) **3**

Abstract **1**

Drawing(s)

10. If you are also filing any of the following, state how many against each item.

Priority Documents

Translations of priority documents

Statement of inventorship and right to grant of a patent (Patents Form 7/77)

Request for preliminary examination and search (Patents Form 9/77) **1**

Request for substantive examination (Patents Form 10/77)

Any other documents (please specify)

11.

I/We request the grant of a patent on the basis of this application.

Signature(s)

Date: 07 July 1999

Sandra Jane EDWARDS, Authorised Signatory

12. Name and daytime telephone number of person to contact in the United Kingdom

Petra Kimber, Tel 01234 222893

Warning

After an application for a patent has been filed, the Comptroller of the Patent Office will consider whether publication or communication of the invention should be prohibited or restricted under Section 22 of the Patents Act 1977. You will be informed if it is necessary to prohibit or restrict your invention in this way. Furthermore, if you live in the United Kingdom, Section 23 of the Patents Act 1977 stops you from applying for a patent abroad without first getting written permission from the Patent Office unless an application has been filed at least 6 weeks beforehand in the United Kingdom for a patent for the same invention and either no direction prohibiting publication or communication has been given, or any such direction has been revoked.

Notes

- If you need help to fill in this form or you have any questions, please contact the Patent Office on 0645 500505.
- Write your answers in capital letters using black ink or you may type them.
- If there is not enough space for all the relevant details on any part of this form, please continue on a separate sheet of paper and write "see continuation sheet" in the relevant part(s). Any continuation sheet should be attached to this form.
- If you have answered 'Yes' Patents Form 7/77 will need to be filed.
- Once you have filled in the form you must remember to sign and date it.
- For details of the fee and ways to pay please contact the Patent Office.

DUPLICATE
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- 1 -

FABRIC CONDITIONING COMPOSITIONS**Field of the Invention**

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The present invention relates to fabric conditioning compositions, and in particular, relates to concentrated cationic fabric softener compositions in the form of water-in-oil micro-emulsions.

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Background of the Invention

Rinse added fabric conditioning compositions are well known. Typically, such compositions comprise a fabric softening agent dispersed in water. The fabric softening agent can be included at up to 8% by weight, in which case the compositions are considered dilute, or at levels from 8% to 60% by weight, in which case the compositions are considered concentrated.

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In addition to softening, fabric conditioning compositions desirably have other properties, including stability upon storage, good dispersibility in water and delivery of sufficient amounts of perfume to the fabric being treated.

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One of the problems frequently associated with conventional concentrated fabric conditioner compositions is physical instability upon storage. This problem is usually accentuated when the composition is stored at low temperature (e.g. at 5 °C or below) or at elevated temperatures.

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Physical instability can manifest itself as a thickening of the composition. This thickening can occur to a level at which the composition is no longer pourable, and, can even
5 lead to the formation of an irreversible gel. Such thickening is very undesirable because the composition can thereafter no longer be conveniently used and/or it is unattractive to the consumer.

10 However, fabric conditioning concentrates are increasingly desired by the consumer. The consumer requires these products to be stable upon storage.

EP 0 829 531 A1 (Unilever) discloses a concentrated fabric
15 conditioner composition, comprising a cationic softener suspended in oil, which delivers perfume benefits to the fabric being treated.

Concentrated, clear compositions containing fabric softening
20 actives have been disclosed in WO 98/08924 and WO 98/47991 (both Procter & Gamble). Such compositions comprise bio-degradable fabric conditioners. However, both disclose compositions comprising water miscible solvents which do not form water-in-oil micro-emulsions.

25 Clear fabric conditioning compositions have also been disclosed in EP 730023 (Colgate Palmolive), WO 96/19552 (Colgate Palmolive), WO 96/33800 (Witco Co.), WO 97/03170 (Procter & Gamble), WO 97/03172 (Procter & Gamble), WO
30 97/03169 (Procter & Gamble), US 5492636 (Quest Int.) and US 5427697 (Procter & Gamble).

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A further problem associated with many conventional concentrated fabric conditioners is that the perfume intensity in the composition decreases significantly during storage. This, correspondingly, results in a less 'perfumed' effect being given to fabric treated with the composition.

However, perfume longevity during storage and perfume delivery are also highly valued by the consumer. Therefore, it is desirable to provide a fabric treatment composition which gives increased perfume longevity during storage, and, better perfume delivery in use.

15 Objects of the Invention

Thus, the present invention seeks to address one or more of the above-mentioned problems, and, to give one or more of the above-mentioned benefits desired by consumers.

20

Surprisingly, we have found that a fabric conditioning composition in the form of a micro-emulsion has good physical stability upon storage, increased perfume longevity and improved perfume delivery to the fabric. In addition, providing the composition as a micro-emulsion appears to improve dispersion of the composition in water.

Summary of the Invention

30 According to the present invention there is provided an aqueous fabric conditioning composition comprising:

(i) one or more cationic surfactants selected from:

(a) quaternary ammonium compounds having at least one ester group and being formed from a parent fatty acid having a degree of unsaturation represented by an iodine value of from 20 to 140 and,

(b) quaternary ammonium compounds having two C₈-C₂₈ alkyl or alkenyl chains directly attached to the nitrogen and being formed from a parent fatty acid having a degree of unsaturation represented by an iodine value of from 0 to 20 and,

(ii) one or more oils,

(iii) one or more solvents,

the composition being in the form of a micro-emulsion.

According to the invention, there is also provided a process for conditioning fabrics comprising the step of adding to a laundry operation the abovementioned fabric conditioning composition.

According to the invention, there is also provided a method for preparing a fabric conditioning composition comprising

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mixing a cationic surfactant, an oil, a solvent and water and either agitating or heating the mixture to form a micro-emulsion.

5 Detailed Description of the Invention

The present invention is particularly concerned with cationic fabric softening compositions which are in the form of water-in-oil micro-emulsions.

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In the context of the present invention, the term 'micro-emulsion' means a liquid product which is an emulsion that is clear, isotropic and thermodynamically stable over a specified temperature range. It does not include

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conventional macro-emulsions which are not clear and isotropic.

The compositions of the invention are typically thermodynamically stable above 10°C. Below 10°C the compositions may become hazy but recover upon warming to ambient temperature where they revert back to a clear isotropic micro-emulsion. When diluted, the compositions are transformed to inverse macro-emulsions (including multiple emulsions) which typically have droplet sizes of

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10^μm or less or mesophases.

Without wishing to be bound by theory, it is believed that the compositions of the invention have a physical state wherein water droplets are stabilised within an oil

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continuous phase by the cationic surfactant and, if present, a dispersibility aid. Typically, the water droplets in the

emulsion have a diameter of between 50-500 Å. The physical structure can be bicontinuous in nature (for an explanation of the physical structures see Micelles, Membranes, Micro-emulsions and Mono-layers, Ed. Gelbart et. al., Springer-
5 Verlag, Chapter 7).

Cationic Surfactant

The fabric conditioning composition of the present invention
10 comprises one or more cationic surfactants.

These surfactants are fabric softening compounds which are typically included in rinse-added fabric softening compositions.

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The surfactants may be quaternary ammonium compounds having at least one ester group and being formed from a parent fatty acid having a degree of unsaturation represented by an iodine value of from 20 to 140 (referred to as type (a)
20 herein).

Alternatively, the cationic surfactants may comprise quaternary ammonium compounds having two C₈-C₂₈ alkyl or alkenyl chains being directly attached to the nitrogen with
25 the compound being formed from a parent fatty acid having a degree of unsaturation represented by an iodine value of from 0 to 20 (referred to as type (b) herein).

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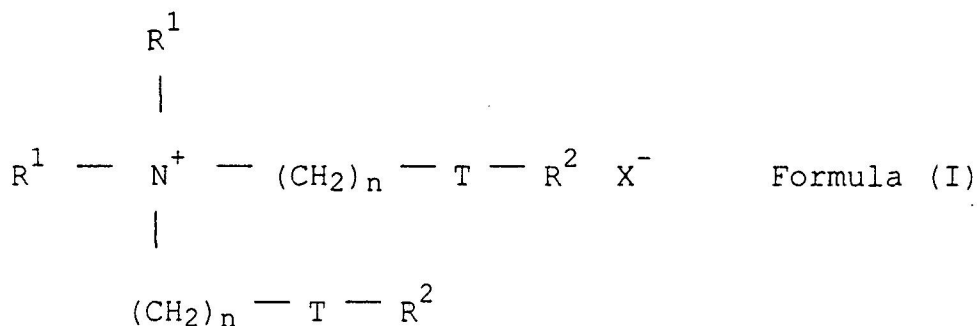
Preferably, the average chain length of the alkyl or alkenyl group is at least C₁₄, more preferably at least C₁₆. Most preferably at least half of the chains have a length of C₁₈.

- 5 Mixtures of the aforementioned types of cationic surfactants, that is mixtures of either type (a) or (b), may also be used according to the invention.

10 It is generally preferred if the alkyl or alkenyl chains are predominantly linear.

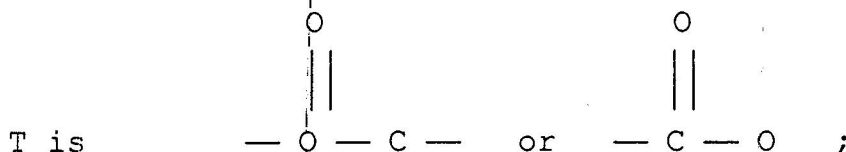
It is especially preferred if the cationic surfactant is a water insoluble quaternary ammonium material which comprises a compound having two C₁₂₋₁₈ alkyl or alkenyl groups
15 connected to the nitrogen head group via at least one ester link. It is more preferred if the quaternary ammonium material has two ester links present.

A first group of preferred ester-linked cationic surfactant materials for use in the invention is represented by formula
20 (I):



wherein each R^1 group is independently selected from C_{1-4} alkyl, hydroxyalkyl or C_{2-4} alkenyl groups; and wherein each R^2 group is independently selected from C_{8-28} alkyl or alkenyl groups;

5



10 X^- is any anion compatible with the cationic surfactant, such as halides or alkyl sulphates, e.g. chloride, methyl sulphate or ethyl sulphate and n is an integer from 0-5.

These compounds are type (a) compounds as herein defined.

15

Especially preferred materials within this formula are di-alkenyl esters of triethanol ammonium methyl sulphate and N-N-di(tallowoyloxy ethyl) N,N-dimethyl ammonium chloride. Commercial examples of compounds within this formula are

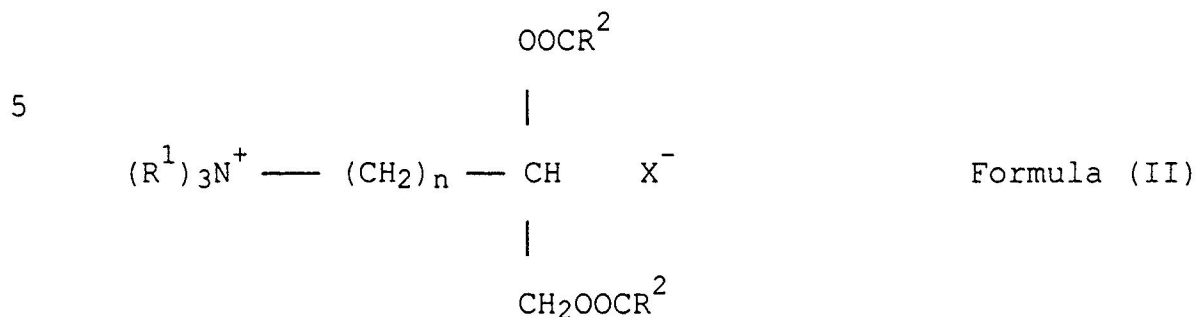
20 Tetranyl® AOT-1 (di-oleic ester of triethanol ammonium methyl sulphate 80% active), AO-1 (di-oleic ester of triethanol ammonium methyl sulphate 90% active), L1/90 (partially hardened tallow ester of triethanol ammonium methyl sulphate 90% active), L5/90 (palm ester of triethanol ammonium methyl sulphate 90% active (supplied by Kao

25 corporation) and Rewoquat WE15 ($C_{10}-C_{20}$ and $C_{16}-C_{18}$ unsaturated fatty acid reaction products with triethanolamine dimethyl sulphate quaternised 90 % active), ex Witco Corporation.

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- 9 -

A second preferred type of quaternary ammonium material is represented by formula (II):



10 wherein R^1 , R^2 , n and X^- are as defined above.

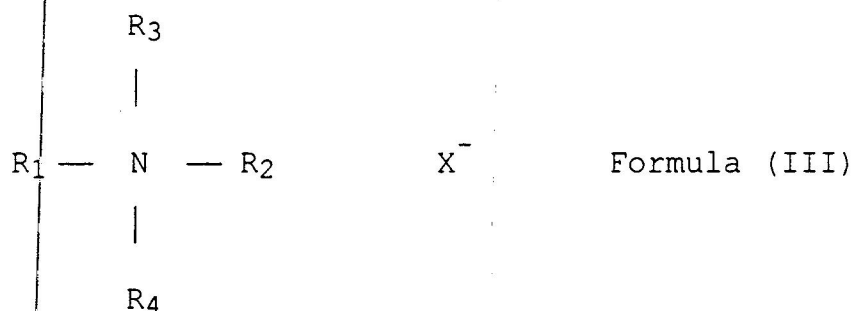
These compounds are also type (a) cationic surfactants as herein defined.

15 Preferred materials of this class such as 1,2 bis[tallowoxy]-3- trimethylammonium propane chloride and 1,2-bis[oleyloxy]-3-trimethylammonium propane chloride and their method of preparation are, for example, described in US 4137180 (Lever Brothers), the contents of which are
20 incorporated herein. Preferably these materials also comprise small amounts of the corresponding monoester, as described in US 4137180.

For type (a) cationic surfactants, the total average iodine
25 value of the parent fatty acid from which R^1 is formed is from 20 to 140, more preferably from about 50 to 130, most preferably from about 80 to 100.

- 10 -

A third preferred type of quaternary ammonium material is represented by formula (III):



where R_1 and R_2 are C₈₋₂₈ alkyl or alkenyl groups; R_3 and R_4 are C₁₋₄ alkyl or C₂₋₄ alkenyl groups and X^- is as defined above.

Examples of compounds within this formula include di(tallow alkyl)dimethyl ammonium chloride, di(tallow alkyl) dimethyl ammonium methyl sulphate, dihexadecyl dimethyl ammonium chloride, di(hardened tallow alkyl) dimethyl ammonium chloride, dioctadecyl dimethyl ammonium chloride and di(coconut alkyl) dimethyl ammonium chloride.

These compounds are type (b) cationic surfactants as herein defined.

For type (b) cationic surfactants, the total average iodine value of the parent fatty acid from which R_1 to R_4 inclusive are formed is from 0 to 20, more preferably from 0 to 10, most preferably from 0 to 5.

- 11 -

It is advantageous for environmental reasons if the quaternary ammonium material is biologically degradable.

- 5 Preferably, the compositions are provided as concentrates comprising from 10-60% by weight of cationic surfactant (active ingredient) based on the total weight of the composition, more preferably 20-55% by weight, most preferably 24-51% by weight.

10

Preferred cationic surfactant compounds are substantially water insoluble.

15

'Substantially water insoluble' surfactant compounds in the context of this invention are defined as compounds having a solubility less than 1×10^{-3} wt% in demineralised water at 20°C. Preferably the cationic surfactants have a solubility less than 1×10^{-4} . Most preferably the cationic surfactants have a solubility at 20°C in demineralised water from 1×10^{-8} to 1×10^{-6} wt%.

20

Iodine Value of the Parent Fatty Acid

25

In the context of the present invention, iodine value of the parent fatty acid of the cationic surfactant is defined as the number of grams of iodine which react with 100 grams of compound.

30

To calculate the iodine value of a parent fatty acid of a cationic surfactant, a prescribed amount (from 0.1-3g) of

- 12 -

the fatty acid was dissolved into about 15ml chloroform. The dissolved parent fatty acid was then reacted with 25 ml of iodine monochloride in acetic acid solution (0.1M). To this, 20ml of 10% potassium iodide solution and about 150 ml deionised water was added. After addition of the halogen to the parent fatty acid had taken place, the excess of iodine monochloride was determined by titration with sodium thiosulphate solution (0.1M) in the presence of a blue starch indicator powder. At the same time a blank was determined with the same quantity of reagents and under the same conditions. The difference between the volume of sodium thiosulphate used in the blank and that used in the reaction with the parent fatty acid enabled the iodine value to be calculated.

Oils

The compositions of the present invention comprise at least one oil. The oil may be a mineral oil, an ester oil and/or natural oils such as vegetable oils. However, ester oils or mineral oils are preferred.

The ester oils are preferably hydrophobic in nature. They include fatty esters of mono or polyhydric alcohols having from 1 to 24 carbon atoms in the hydrocarbon chain, and mono or polycarboxylic acids having from 1 to 24 carbon atoms in the hydrocarbon chain, provided that the total number of carbon atoms in the ester oil is equal to or greater than 16, and that at least one of the hydrocarbon chains has 12 or more carbon atoms.

- 13 -

Suitable ester oils include saturated ester oils, such as the PRIOLUBES (ex. Unichema). 2-ethyl hexyl stearate (PRIOLUBE 1545), neopentyl glycol monomerate (PRIOLUBE 2045) and methyl laurate (PRIOLUBE 1415) are particularly preferred although oleic monoglyceride (PRIOLUBE 1407) and neopentyl glycol dioleate (PRIOLUBE 1446) are also suitable.

It is preferred that the viscosity of the ester oil is from 0.002 to 0.4 Pa.S (2 to 400 cps) at a temperature of 25°C at 106s⁻¹, measured using a Haake rotoviscometer, and that the density of the mineral oil is from 0.8 to 0.9g.cm⁻³ at 25°C.

Suitable mineral oils include the Marcol technical range of oils (ex Esso) although particularly preferred is the Sirius range (ex Silkolene) or Semtol (ex. Witco Corp.). The molecular weight of the mineral oil is typically within the range 150 to 400.

One or more oils of any of the above mentioned types may be used.

It is believed that the oil provides excellent perfume delivery to the cloth and also increases perfume longevity upon storage of the composition.

The oil may be present in an amount from 10-70% by weight, more preferably 12-60%, by weight most preferably 15-52% by weight based on the total weight of the composition.

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Preferably, the weight ratio of cationic softener to oil in the composition is in the range 5:1 to 1:10 more preferably 4:1 to 1:5, most preferably 3:1 to 1:3.

5 Solvent

The compositions also comprise one or more solvents. The solvent is preferably a low molecular weight (preferably 120 or less) alcohol, including diols.

10

The presence of the lower molecular weight alcohol helps improve physical stability upon storage by lowering the viscosity to a more desired level and also assists the formation of the micro-emulsion. Examples of suitable
15 alcohols include ethanol, isopropanol, n-propanol, dipropylene glycol, t-butyl alcohol and hexylene glycol.

20

The solvent may be added to the composition either by being present as a component in the cationic surfactant or it may be added separately.

25

The solvent is preferably present in an amount from 0.05% to 25% by weight, more preferably from 0.1% to 20% by weight, most preferably from 0.15% to 16% by weight, based on the total weight of the composition.

Mixtures of solvents may be used if desired.

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Water

The compositions of the invention are aqueous based.

- 5 Typically, the level of water present is from 1-35% by weight, more preferably 2-30% by weight, most preferably 3-25% by weight, based on the total weight of the composition.

Dispersion Aids

10

Optionally and advantageously, the compositions contain one or more dispersion aids. The dispersion aid assists the dispersion of the micro-emulsion when it is diluted in water.

15

Especially preferred dispersion aids for use in the compositions of the invention are alkoxyated nonionic fatty alcohols, such as C₁₀-C₂₂ alkyl/alkenyl alkoxyated with 3-20 moles alkoxy moieties. The fatty alcohols may be

20 alkoxyated with ethylene oxide, propylene oxide or ethylene oxide/propylene oxide mixtures.

25

Other dispersion aids which may be used in the compositions of the invention can be selected from mono-long chain alkyl cationic quaternary ammonium compounds and mono-long chain alkyl amine oxides.

30

Preferably the concentration of the dispersion aid is from 0.05-30% by weight, more preferably from 0.3-20% by weight, most preferably from 1-15% by weight, based on the total weight of the composition.

The dispersion aid may also act as a stabiliser for the micro-emulsion so that addition of the dispersion aid provides a more stable micro-emulsion product.

5

It is particularly preferred that a dispersion aid is present when, in compositions containing type (a) cationic surfactant compounds as herein defined, at least 10% by weight of water is present or, in compositions containing
10 type (b) cationic surfactant compounds as herein defined, at least 3% by weight of water is present, based on the total weight of the composition.

The weight ratio of the quaternary cationic softening
15 compound to the total amount of dispersion aid is from 3:1 to 8:1, more preferably 5:1 to 7:1.

Anti-Oxidation/Reduction Stabilisers

20 The compositions of the invention may, optionally, comprise one or more additional stabilisers which stabilise against oxidation and/or reduction.

If the stabilisers are present as anti-oxidants, they may be
25 added at a level of from 0.005 to 2% by weight based on the total weight of the composition, more preferably from 0.01 to 0.2% by weight, most preferably from 0.035% to 0.1% by weight.

If present as an anti-reduction agent, then the stabiliser is preferably used in an amount from 0.001% to 0.2% by weight based on the total weight of the composition.

- 5 The stabilisers assist by assuring good odour stability upon storage particularly when the composition is prepared using a surfactant having substantial unsaturated character (i.e. type (a) surfactants as herein defined).
- 10 Typically, such additional stabilisers include mixtures of ascorbic acid, ascorbic palmitate and propyl gallate (under the tradenames Tenox® PG and Tenox® S-1); mixtures of butylated hydroxytoluene, butylated hydroxyanisole, propyl gallate and citric acid (under the tradename Tenox® 6);
- 15 tertiary butylhydroquinone (under the tradename Tenox® TBHQ); natural tocopherols (under the tradenames Tenox® GT-1 and GT-2); long chain esters of gallic acid (under the tradenames Irganox® 1010, Irganox® 1035, Irganox® B 117 and Irganox® 1425) and mixtures thereof. Tenox products are
- 20 supplied by Eastman Chemical Products Inc. Irganox products are supplied by Eastman Chemical Products Inc.. The above stabilisers can also be mixed with chelating agents such as citric acid; 1-hydroxyethylidene-1,1-diphosphonic acid (Dequest® 2010, ex Monsanto); 4,5-dihydroxy-m-benzene-
- 25 sulphonic acid/sodium salt (under the tradename Tiron®, ex Kodak) and diethylenetriaminepentaacetic acid (under the tradename DTPA®, ex Aldrich).

Co-Actives

Compounds that act as co-actives for the cationic surfactants may also be incorporated in an amount from 0.01 to 20% by weight, more preferably 0.05 to 10%, based on the total weight of the composition. Preferred co-actives are fatty acids, fatty amines and fatty N-oxides.

Perfumes

10

The compositions of the invention may also comprise one or more perfumes.

When present, the perfume is used in a concentration of preferably from 0.01-15% by weight, more preferably from 0.05-10% by weight, most preferably from 0.1-5% by weight based on the total weight of the composition.

Other Optional Ingredients

20

The compositions may also contain one or more optional ingredients conventionally included in fabric conditioning compositions such as pH buffering agents, perfume carriers, fluorescers, colourants, hydrotropes, antifoaming agents, antiredeposition agents, polyelectrolytes, enzymes, optical brightening agents, anti-shrinking agents, anti-wrinkle agents, anti-spotting agents, germicides, fungicides, anti-corrosion agents, drape imparting agents, anti-static agents, ironing aids, dyes and fatty acids.

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Preparation

The compositions of the invention may be prepared according
5 to any suitable method.

In a first method, a mixture of an oil, a low molecular
weight solvent, a dispersibility aid, water and a cationic
surfactant are stirred under low agitation until a clear
10 composition is formed having a viscosity of 0.5Pa.S (500
cps) or less at a shear rate of $106s^{-1}$ at 25°C, measured
using a Haake rotoviscometer.

In a second method a mixture of an oil, a low molecular
15 weight solvent, a dispersibility aid, water and a cationic
surfactant are heated until a molten mixture is formed and
then the mixture is left to cool. Perfume is added to the
mixture when it reaches ambient temperature.

20 The micro-emulsion is easily obtained with only gentle
agitation of the composition ingredients (in the first
method) or a small thermal activation (in the second method)
being required to accelerate micro-emulsification.

25 Product Form

In its undiluted state at ambient temperature the product is
in the form of a micro-emulsion, preferably a water-in-oil
micro-emulsion.

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- 20 -

Preferably the compositions form stable micro-emulsions at between about 10°C and about 50°C.

The compositions are generally provided in a highly concentrated form but have a viscosity that is acceptable to the consumer. Typically the compositions have a viscosity of 0.5 Pa.S (500 cps) or less, preferably 0.2 Pa.S (200 cps) or less, most preferably 0.12 Pa.S (120 cps) or less at a shear rate of $106s^{-1}$ at 25°C, measured using a Haake rotoviscometer.

The micro-emulsion compositions of the invention provide excellent storage stability across a wide temperature range. In the context of the present invention, the phrase 'storage stability' means that the liquid composition, which may solidify at low temperature, will revert to a stable micro-emulsion when the temperature is raised to about 10°C or above.

The composition is preferably used in the rinse cycle of a home textile laundering operation, where, it may be added directly in an undiluted state to the washing machine, e.g. through a dispenser drawer. Alternatively, it can be diluted prior to use. The compositions may also be used in a domestic hand-washing laundry operation.

When the composition is used in a diluted form, an oil in water macro-emulsion is formed which typically has a viscosity of between 0.005-0.12 Pa.S (5-120 cps), preferably at least 0.015 Pa.S (15cps) at a dilution ratio of 1:9 (one

part composition to 9 parts water) at a shear rate of 106s⁻¹ at 25°C, measured using a Haake rotoviscometer.

Composition pH

5

When the composition is dispersed in water, the solution preferably has a pH of from 1.5 to 5.

Examples

10

The invention will now be illustrated by the following non-limiting examples. Further modification within the scope of the present invention will be apparent to the person skilled in the art.

15

Examples 1-13, set out in table 1, are compositions according to the present invention. Examples A-D are comparative examples.

20

Examples 1 to 8 were prepared by heating a cationic surfactant, oil, dispersibility aid, solvent and water in a beaker to 70°C until a clear composition was formed. The composition was then cooled to ambient temperature under stirring using a Heidolph low shear mixer at 500 rpm. A

25

perfume was added when the composition reached ambient temperature.

Examples 9 to 13 were prepared by stirring the cationic surfactant, dispersibility aid, solvent, water, oil, and

- 22 -

perfume at ambient temperature using a Heidolph low shear mixer until a clear product was formed.

Percentages in table 1 are by weight*, based on the total
5 weight of the composition. (*For the components containing cationic surfactants, percentages are by weight of the active ingredient - i.e. the cationic surfactant within the component).

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Table 1

Component	1	2	3	4	5	6	7	8	9	10	11	12	13
Arquad 2-HT ^a	30.4	30.4	24	28	30.4	30.4							
Tetranyl AOT-1 ^b							29.1	29.1	50.9		29.1		
Tetranyl AO-1 ^c										40.5			
Cationic surfactant ^d												18.8	
Cationic surfactant ^e													36.4
Perfume	4	4	4	3	4	4	2	2	2.7	3	3	2.9	2.7
Water	22	16	22.5	23.5	22	12	5	20	4.4	11	7	9.8	9.1
Hexylene glycol		7		7.5									
Isopropanol	7.5		5.5		7.5	7.5						15.8	9.1
Coco-20 ^f					6					5			
Coco-3 ^g							4.8	4.8	4.8		4.8	4.9	4.5
Tergitol 15-s-5 ^h	5		6			6							
CTAC ⁱ				6									
Pristerene 4916 ^j											3.3		
Tergitol 15-s-7 ^k		6											
Sirius M85 ^l	23.5	29		25	22.5	32.5				36			
Estol 1545 ^m			36				51.8	36.8	24.5		45.5	41.2	38.2

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- ^a dimethyl di-hardened tallow quaternary ammonium chloride containing about 20% IPA used as supplied.
- ^b tetranyl AOT-1 (ex Kao) is dioleyl ester of triethanol ammonium methyl sulphate containing about 20% DPG, the starting parent fatty acid having an iodine value of 80-90.
- ^c Tetranyl AO-1 is as AOT-1 except that it contains 10 % IPA as solvent.
- ^d 1,2 bis [tallowoxyloxy]-3-trimethylammonium propane chloride prepared from a parent fatty acid having an iodine value of 52 (71.4 % active; ester qua to free fatty acid present in a 6:1 weight ratio).
- ^e 1,2-bis[oleyloxy]-3-trimethylammonium propane chloride prepared from a parent fatty acid having an iodine value of 80 (100% active).
- ^f Coco-20 (ex Clarient) is C₁₂ alkyl ethoxylated with 20 moles ethylene oxide.
- ^g Coco-3 (ex Clarient) is C₁₂ alkyl ethoxylated with 3 moles ethylene oxide
- ^h Tergitol (ex Union Carbide) 15-s-5 is a mixture of C₁₁₋₁₅ secondary alcohols reacted with ethylene oxide average number of ethoxylates = 5.
- ⁱ CTAC is cetyl trimethyl ammonium chloride.
- ^j Pristerene 4916 (ex Unichema) is hardened tallow fatty acid.

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^k Tergitol (ex Union Carbide) 15-s-7 is a mixture of C₁₁₋₁₅ secondary alcohols reacted with ethylene oxide average number of ethoxylates = 7.

^l Sirius M-85 (ex Silkolene) is a hydrocarbon oil mix.

5 ^m Estol 1545 (ex Unichema) is octyl stearate

Examples A, B, and C are conventional dilute fabric softening compositions.

10 Example A is dilute 'Comfort' commercially available in the UK (April 1999).

Example B is dilute 'Lenor' commercially available in the UK (April 1999).

15

Example C is dilute 'Fofa' commercially available in Brazil (April 1999).

20 Example D is a crystalline precursor fabric softening composition (comprising 2-HT 38%wt, Coco-5 6%wt, perfume 4%wt, Sirius M85 40%wt, hexylene glycol 12%wt, based on the total weight of the composition).

A. Stability Performance

25

Samples of each of examples 1 to 13 and A, B and D were stored at various temperatures. After storage for eight weeks at ambient temperature, Examples 1-13 were all stable micro-emulsions. After storage for eight weeks at 4°C,

30 Examples 1-6 were solid and Examples 7-13 were hazy.

- 26 -

However, on warming to ambient temperature, all compositions reverted to micro-emulsions. After six weeks storage at 37°C and 45°C, Examples 1-13 were all micro-emulsions.

- 5 By contrast, after storage for 6 weeks at 37 and 45 degrees, both Examples A and B thickened irreversibly and underwent phase separation.

After storage for one week at ambient temperature, Example D
10 sedimented, and, after storage for six weeks at 37°C, Example D was isotropic but upon cooling to ambient temperature the composition crystallised.

Thus Examples 1-13 demonstrated better overall stability
15 than the comparative examples, across a range of temperatures.

B. Softening Evaluation of Cloth Treated in a Tergotometer

20 The softening performance of freshly prepared compositions was evaluated by adding 0.1 g of the composition to 1 litre of demineralised water at ambient temperature in a Tergotometer to form a rinse liquor. The level of active ingredients in the rinse liquor for the examples of the
25 invention and the comparative examples was the same. Three pieces of terry towelling (20 cm x 20 cm) were added to the Tergotometer pot (the towelling having previously been rinsed for 1 minute with 0.001 % wt/wt. sodium alkyl benzene sulphonate to simulate carry-over of anionic detergent from
30 the main wash). The cloths were rinsed for five minutes in

the Tergotometer pot at 65 rpm, spin dried to remove excess liquor, and line dried overnight.

Softness was evaluated by a trained panel who ranked the cloths against set standards. A low number indicates a greater degree of softening. Softness was based on a comparative numbering system which ranged from 1 for an exceptionally soft cloth to 11 for a very rough/hard cloth. Untreated cloth was rated as 8. The results are given in table 2.

Table 2

Top line is the example number

Bottom line is the softness score^a

5

1	2	3	4	5	6	7	8	9	10	11	12	13	A	B	D
4.4	5	4.8	5	4.5	4.1	5.3	4.5	5.1	5.0	5	4.9	4.5	4.0	3.0	6.5 ^a , 3.9 ^b

^a 6.5 softness when dispensed as precursor (i.e. added to the tergotometer in an undiluted form)

^b 3.9 softness when dispensed in macro-emulsion form (i.e. 1 part composition diluted in 9 parts water prior to being dispensed in the tergotometer).

10

C. Softening Evaluation of Cloth Treated in a Domestic Washing Machine

5 Softening performance of freshly prepared compositions was evaluated by adding to the dispensing drawer of a Miele washing machine the fabric softening compositions. In all examples the level of active was 1.36g per litre of water in the final rinse. Three pieces of terry towelling (20 cm x 10 20 cm) were added to the washing machine along with 1.6 Kg of mixed fabric ballast (polycotton, cotton, and terry-towelling). 66 g of a commercially available detergent composition was placed in the detergent drawer and the machine set to run on a 50°C wash programme. After the final 15 rinse and spin, the terry-towelling cloths were line dried overnight prior to being assessed by an expert panel. The results are given in Table 3.

Table 3

20

Example	1 ^a	1 ^b	C ^c	D ^d	D ^e
Softness	4.3	4	4	4	6.5

^a diluted with water prior to use (1 part micro-emulsion to 9 parts water).

^b undiluted prior to use.

25 ^c used as bought

^d diluted 1 part crystalline pre-cursor to 9 parts water.

^e undiluted prior to use.

The results in tables 2 and 3 demonstrate that the softening performance of the examples of the invention was at least as good as the comparative examples.

5

D. Perfume Evaluation of Cloth Treated in a Tergotometer

Perfume delivery from the compositions was evaluated by rinsing three pieces of terry towelling (20 cm x 20 cm) per product in a similar manner to that previously described for softening evaluation of cloth treated in a tergotometer. The composition was added in a sufficient amount to give 0.1 g/L active with a perfume level in the rinse liquor of 4.8 mg/L. Table 4 illustrates the results from a washing machine run as per the section above.

10
15

Perfume intensity on the cloth was evaluated by an expert panel who ranked the perfume intensity against set standards. Perfume intensity was based on a comparative numbering system which ranged from 0, denoting undetectable, to 5, denoting exceptionally strong perfume intensity. The results are given in Table 4.

20

Table 4

25

Example	1	3	5	8	10	12	A	B
Perfume Intensity	2	2.6	3	2	2.8	2	0.5	0.7

Thus, the perfume intensity from cloth treated with the compositions according to the invention was significantly

greater than that on cloth treated with the compositions of comparative examples.

E. Perfume Evaluation of Cloth Treated Using a Domestic Washing Machine

The cloth was treated in the manner previously described for softening evaluation of cloth treated in a domestic washing machine, as above. Perfume intensity was measured according to the criteria described hereinbefore. The results are given in Table 5.

Table 5

Product	Time after rinse treatment (hours)	Perfume intensity
Example 1	0	4.5
	5	2.7
	24	1.8
C	0	4.5
	5	2.3
	24	0.7

The results show that cloth treated according to the invention retained greater perfume intensity over a measured period of time than a cloth treated according to the comparative examples.

F. Dispersion Test

Dispersion of some of the compositions was assessed by turbidity.

5

Turbidity was measured using a Brinkman PC801 colorimeter. Equal weights of the compositions were added to 500ml of demineralised water at 10°C under continuous stirring to produce a 2.5cm vortex. The change in turbidity (i.e. a decrease in light intensity) with time was recorded on a chart recorder. A turbidity curve was determined which initially rose as dispersion took place, then reached a plateau when dispersion was complete. To assess the rate of dispersion the turbidity after 12 seconds compared to the plateau turbidity was expressed as % dispersion after 12 seconds. The results are given in Table 6.

10
15Table 6

Composition	% Dispersion after 12 seconds
1	95
5	90
7	85
9	88
13	97
A	93
B	90
C	65

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This shows that, for concentrated compositions (i.e. examples 1, 5, 7, 9, 13 and C), the compositions according to the invention dispersed more rapidly than the composition according to the comparative example.

5

This also demonstrates that the concentrated compositions according to the invention dispersed at a similar rate to the dilute comparative compositions (A and B). This result is surprising since dilute compositions would typically be expected to disperse more rapidly than concentrated compositions.

10

Overall, examples A-F show that the compositions according to the invention were, relative to the comparative examples, more stable over a range of temperatures delivered more perfume, had increased perfume longevity and showed unexpectedly high dispersion rates while retaining softening characteristics comparable to those of the comparative examples.

15

CLAIMS

1. An aqueous fabric conditioning composition comprising:

5 (i) one or more cationic surfactants selected from:

(a) quaternary ammonium compounds having at least one ester group and being formed from a parent fatty acid having a degree of unsaturation represented by an iodine value of from 20 to 140 and,

10

(b) quaternary ammonium compounds having two alkyl or alkenyl chains directly attached to the nitrogen and being formed from a parent fatty acid having a degree of unsaturation represented by an iodine value of from 0 to 20 and,

15

20 (ii) one or more oils,

(iii) one or more solvents,

the composition being in the form of a micro-emulsion.

25

2. A fabric conditioning composition according to claim 1 comprising from 10% to 60% by weight, more preferably 20-55% by weight, most preferably 24-51% by weight of the cationic surfactant, based on the total weight of the composition.

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INVENTORIAL OFFICIAL No. 5.737
Marta L. de Rastrogo
Intercede 0201
del 10 de Junio

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3. A fabric conditioning composition according either of the claims 1 or 2 in which the weight ratio of cationic surfactant to oil is 5:1 to 1:10, more preferably 4:1 to 1:5, most preferably 3:1 to 1:3.

5

4. A fabric conditioning composition according to any one of the preceding claims in which the oil is an ester oil or a mineral oil.

10

5. A fabric conditioning composition according to any one of the preceding claims in which the oil is present in an amount 10 to 70% by weight, more preferably 12 to 60% by weight, most preferably 15 to 52% by weight, based on the total weight of the composition.

15

6. A fabric conditioning composition according to any one of the preceding claims in which the solvent is an alcohol having a molecular weight of 120 or less.

20

7. A fabric conditioning composition according to any one of the preceding claims in which the solvent is present in an amount 0.05 to 25% by weight, more preferably 0.1 to 20% by weight, most preferably 0.15 to 16% by weight, based on the total weight of the composition.

25

8. A fabric conditioning composition according to any one of the preceding claims further comprising a dispersion aid.

9. A fabric conditioning composition according to claim 8 in which the dispersion aid is an alkoxylated fatty alcohol.

5 10. A fabric conditioning composition according to either of claims 8 or 9 in which the dispersion aid is present in an amount 0.05 to 25% by weight, more preferably 0.1 to 16% by weight, most preferably 0.15 to 10% by weight, based on the total weight of the composition.

10

11. A fabric conditioning composition according to any one of claims 8, 9 or 10 in which the dispersion aid also acts as a stabiliser for the micro-emulsion composition.

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Departamento de Registro
Interpretación Oficial
Ayuntamiento de San Juan

15 12. A process for conditioning fabrics comprising the step of adding to a laundry operation the fabric conditioning composition claimed in any one of the preceding claims.

20 13. A process according to claim 12 comprising dosing the composition in undiluted form directly into a washing machine.

14. A process according to claim 12 comprising diluting the composition prior to use.

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15. A method for preparing a fabric conditioning composition comprising mixing at least one cationic surfactant, at least one oil, a solvent and water and either agitating or heating the mixture to form a micro-emulsion.

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8-ABSTRACTFABRIC CONDITIONING COMPOSITION*storage stable*

Aqueous fabric conditioning composition comprises a cationic surfactant, an oil, a solvent and is in the form of a water-in-oil micro-emulsion. The cationic surfactant comprises either (a) quaternary ammonium compounds having at least one ester group and being formed from a parent fatty acid having a degree of unsaturation represented by an iodine value of from 20 to 140 or (b) quaternary ammonium compounds having two C₈-C₂₈ alkyl or alkenyl chains directly attached to the nitrogen and being formed from a parent fatty acid having a degree of unsaturation represented by an iodine value of from 0 to 20 or (c) mixtures of (a) and (b). ~~The invention also relates to a process for treating fabrics and a method for preparing a fabric treatment composition.~~

102
81

TRADUCCION OFICIAL No.187

**TRADUCCION OFICIAL DE UN DOCUMENTO PRESENTADO EN INGLES.
LEGALIZACION TRASPASO DERECHOS DE PRIORIDAD DE UNILEVER PLC A
UNILEVER N.V.**

C3940 (C) / CO

TRASPASO DE DERECHOS DE PRIORIDAD

NOSOTROS,

UNILEVER PLC

una compañía organizada de conformidad con las leyes
de Gran Bretaña de Unilever House, Blackfriars, Londres
EC4P 4BQ, Reino Unido

por el presente traspasamos a

Unilever NV

una compañía holandesa de
Veena 455, 3013 Al Rotterdam, Holanda

todos nuestros derechos para solicitar y obtener una patente registrada en su
nombre, junto con el derecho de prioridad, en

COLOMBIA

de conformidad con las disposiciones de la Convención Internacional de
Protección de la Propiedad Industrial sobre la base de

Solicitud de Patente No.: 9915964.2

Fecha: 7 de julio 1999 (07.07.99)

Registrada en: Reino Unido

Por: Unilever PLC (como aparece más arriba)

[Firma]
DADA SALAMANCA DE ABOGADO
TRADUCTORA OFICIAL
DES MINISTRIA 2238

103
82

Unilever N. V., por el presente acepta dicho traspaso y cesión.

EN FE DE LO CUAL, se firma el presente documento el 4 de noviembre, 2000.

UNILEVER PLC,

Por : **Dilshad RAJAN**
Signatario autorizado - UNILEVER PLC

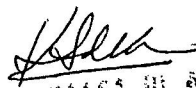
UNILEVER N.V.,

Por: **Sandra Jane EDWARDS**
Signatario autorizado - UNILEVER N.V.

Certificado, verificado y autenticado en la ciudad de Egham en Surrey, el 19 de junio del 2000.

Firmado: **KENNETH GREENWOOD**
NOTARIO PUBLICO
HORNE ENGALL AND FREEMAN

Sello en papel dorado del Notario Público Kenneth Greenwood.


DARIA SALAMANCA DE ADOCU
TRADUCTORA OFICIAL
RES. MINJUSTICIA 3718

104
83

REINO UNIDO DE GRAN BRETAÑA E IRLANDA DEL NORTE

Fecha: Junio 20, 2000

No. D 596992

Este documento lleva la firma/sello de

K. GREENWOOD

Quien actúa en su condición de

Notario Público

Firmado: **D. GOODWIN**

Principal Secretario de Estado de Su Majestad para Asuntos
Extranjeros y de la Commonwealth.

Hay sello en altorrelieve y plano de la Foreign and Commonwealth Office de
Londres.

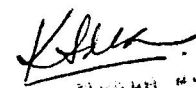
**CONSULADO GENERAL DE COLOMBIA
LONDRES**

AUTENTICACIÓN No. 01101-06

CERTIFICA el cargo y funciones de **D. Goodwin** y la autenticidad de su sello y
firma. Expedida junio 21, 2000, en Londres

Firmado: **JAIME LOZADA PERDOMO**

Cónsul General de Colombia


A la Secretaría de Estado de Su Majestad
Principal Secretario de Estado
066. JUN 21 2000

Hay sello del Consulado General de Colombia en Londres

105

84

MINISTERIO DE RELACIONES EXTERIORES
SANTA FE DE BOGOTA

N° 296641

CERTIFICA la firma y el cargo del funcionario consular **JAIME LOZADA PERDOMO**, el día julio 13, 2000.

(Firma) Ilegible

JEFE DE LEGALIZACIONES

Santafé de Bogotá, D.C.

KATIA SALAZAR DE ALBA
TRADUCTORA OFICIAL
DES MINISTROS

NO SE ASUME
RESPONSABILIDAD DEL TEXTO

2000 JUL 17 A 11:55
Lozada
JEFE DE LEGALIZACIONES
SANTAFÉ DE BOGOTÁ D.C.

MINISTERIO DE RELACIONES
EXTERIORES

2985591
KATIA SALAMANCA
CUYA FIRMA APARECE EN EL
DOCUMENTO DESEMPENA
LAS FUNCIONES INDICADAS

85

UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND

20 JUN 2000

No. D 596992

to

This document bears the signature/seal of

K. GREENWOOD

.....

acting in the capacity of

Notary Public

.....

D. GOODWIN

JD



.....
*For Her Majesty's Principal Secretary of State
for Foreign and Commonwealth Affairs.*

38

CONSULADO GENERAL DE COLOMBIA
LONDRES



AUTENTICACION

01101-06

EL CONSUL DE COLOMBIA DE FE DE
QUE

EJERCE EN L. LAS FUNCIONES
DE

Y QUE SU P. SON LOS
QUE ACCOMPANAN EN SUS ACTOS

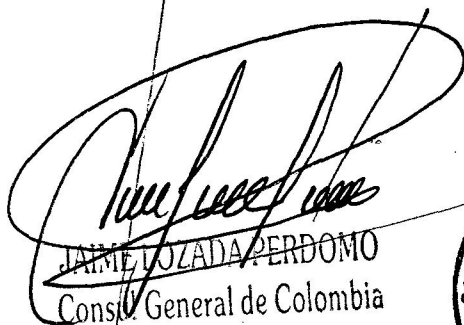
OFICIALES

LONDRES

21 JUN 2000

PAGADO IMPUESTO
DE TIMBRE

DERECHOS: US\$


JAIME LOZADA PERDOMO
Consul General de Colombia



ASSIGNMENT OF PRIORITY RIGHTS

We,

UNILEVER PLC

a company organised under the laws of Great Britain of
Unilever House, Blackfriars, London EC4P 4BQ, United Kingdom

hereby assign to

Unilever NV

a Dutch company of
Weena 455, 3013 AL Rotterdam, Netherlandsour entire right to apply for and to obtain a registered patent in their name, together with
the right of priority, in

COLOMBIA

in conformity with the provisions of the International Convention for the Protection of
Industrial Property on the basis of

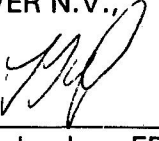
Patent Appl. No: 9915964.2
Dated: 7th July 1999 (07.07.99)
Filed in: United Kingdom
By: Unilever PLC (as above)

Unilever N.V., hereby accepts such transfer and assignment.

IN WITNESS WHEREOF, the present document is hereby signed on the 4th November
1999.

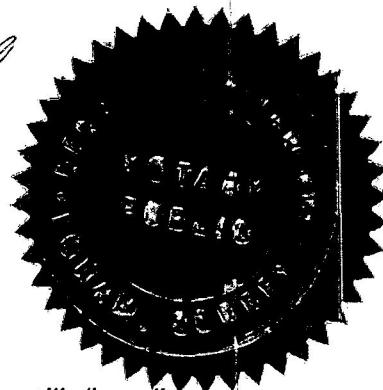
UNILEVER PLC,


By: Dilshad RAJAN
UNILEVER PLC - Authorised Signatory

UNILEVER N.V.,

By: Sandra Jane EDWARDS
UNILEVER N.V. - Authorised Signatory

certified Verified and Authenticated
In the town of Egham in Surrey
19th Day of Nov 2000

KENNETH GREENWOOD
NOTARY PUBLIC
HORNE ENGALL AND FREEMAN



Notarise/Apostille/Legalise

2do. EXAMEN DE FORMA PATENTE DE INVENCION

Folio 407

Radicación no 00-49307

Concepto Técnico no 1327 Clasificación Internacional de Patentes: C 11 D 1/62

Practicado el examen de acuerdo a lo establecido en el Art. 38 de la Decisión 486 se determinó que esta solicitud de **Patente de Invención**:

- SI ☒ NO ☐ Contiene un resumen de la invención (Art.26-e).
- SI ☒ NO ☐ Contiene el título o nombre de la invención (Art.27-d).
- SI ☒ NO ☐ Contiene la descripción de la invención (Art.26-b).
- SI ☐ NO ☐ NO ES APLICABLE ☒ Contiene los dibujos necesarios para comprender la invención (Art.26-d)
- SI ☒ NO ☐ Contiene una o más reivindicaciones. (Art.26-c).
- SI ☐ NO ☒ NO ES APLICABLE ☐ Han sido desarrollados los productos y/o procedimientos a partir de recursos genéticos o de sus productos derivados de los que cualquiera de los Países Miembros es país de origen. (Art. 26- h).
- SI ☐ NO ☒ NO ES APLICABLE ☐ Los productos y/o procedimientos han sido obtenidos o desarrollados a partir de los conocimientos tradicionales de las comunidades indígenas, afroamericanas, o locales de los países miembros, de acuerdo a lo establecido en la Decisión 391 y sus modificaciones y reglamentaciones vigentes.(Art.26-i).
- SI ☐ NO ☒ La invención se refiere a un producto relativo a un material biológico. (Art.26-J).
- SI ☒ NO ☐ La prioridad coincide con la materia reivindicada.
- SI ☒ NO ☐ **CUMPLE LOS REQUISITOS TÉCNICOS**

OBSERVACIONES Y OTROS:

Se acepta nuevo título en folio 51. Se acepta nuevo capítulo reivindicatorio (folios 61-63) modificado de acuerdo con las observaciones hechas en el primer examen de forma. Se aceptan modificaciones al capítulo descriptivo en los folios 59-60. Se acepta nuevo extracto para publicación junto con nuevas tarjetas de archivo temático y de propietarios. Se acepta la prioridad.

EXAMINADOR TÉCNICO

202043

Bogotá D. C., 2002-07-05

2020
Bogotá D.C.

88
416.
2002/10/30

Doctor
JOSÉ ANTONIO LLOREDA
Apoderado

REFERENCIA:	Radicación No.	00-49307
	Trámite	002
	Evento	001
	Actuación	416
	Oficio No.	1327
	Folios	001

Teniendo en cuenta que la solicitud de privilegio de patente que se tramita bajo el expediente indicado en la referencia, reúne los requisitos de forma establecidos en los artículos 26 y 27 de la Decisión 486 de la Comisión de la Comunidad Andina, y en las demás disposiciones vigentes sobre la materia, se envía el extracto de la solicitud a la Oficina de Comunicaciones para efecto de su publicación en la Gaceta de Propiedad Industrial, conforme lo establece el artículo 40 de la misma Decisión.

Cúmplase

Dado en Bogotá D.C., a los

31 JUL 2002


ALIX CARMENZA CÉSPEDES DE VERGEL
Jefe de la División de Nuevas Creaciones

Bogotá, DC, 23-02-2006 El extracto de esta solicitud fue publicado en el número 521 de la Gaceta de Propiedad Industrial, de fecha 30-10-2002. El término hábil señalado por la ley expiró el 29-01-2003 y SI ☐ NO ☒ se presentaron oposiciones por parte de terceros.