

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
26 January 2012 (26.01.2012)

(10) International Publication Number
WO 2012/011043 A1

PCT

(51) International Patent Classification:

A61K 8/31 (2006.01) A61K 8/97 (2006.01)
A61K 8/81 (2006.01) A61Q 1/10 (2006.01)

(21) International Application Number:

PCT/IB2011/053191

(22) International Filing Date:

18 July 2011 (18.07.2011)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

1055943 21 July 2010 (21.07.2010) FR
61/370,961 5 August 2010 (05.08.2010) US

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

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

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

(54) Title: COMPOSITION FOR CARING FOR AND/OR MAKING UP KERATIN FIBRES

(57) Abstract: The present invention relates to a cosmetic composition for caring for and/or making up keratin fibres, and more particularly the eyelashes, comprising, in a physiologically acceptable medium, at least: - isododecane, - 3% by weight, relative to the total weight of the said composition, of elastomeric polymer(s) comprising at least one unit chosen from isoprene, butadiene and/or butylene, and - a tackifying resin with a number-average molecular weight of less than or equal to 10 000 g/mol, chosen from rosin, rosin derivatives, and hydrocarbon-based resins, and mixtures thereof, the said elastomeric polymer(s) being free of styrene monomer, and having a molecular weight of greater than or equal to 100 000 g/mol and preferably greater than or equal to 1 000 000 g/mol.



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Composition for caring for and/or making up keratin fibres

The present invention relates to the field of cosmetic compositions for making up and/or caring for keratin fibres, and more particularly the eyelashes.

5 In general, conventionally applied mascaras have staying power that does not exceed one day. Beyond one day, mascara films have a tendency to crumble away over time and grains of mascara composition detach from the films, then forming unattractive marks on either side of the eyelids. This defect of staying power over time thus obliges users to make up their eyelashes and to remove the eyelash makeup daily.

10 The development of mascara formulations that have significantly increased stability over time is thus an ongoing concern in the cosmetics field, and mascara formulations have already been developed in an attempt to satisfy this expectation.

Thus, documents US 6,458,390 and WO 02/094182 describe anhydrous mascara formulations based on isododecane gelled with Bentone and containing a silicone
15 resin in a silicone medium. These mascara compositions have prolonged staying power beyond one day, but unfortunately not exceeding two days.

Documents EP 1 834 633 and EP 1 743 626 describe for their part mascara formulations using a mixture of styrene block copolymer, for instance a copolymer of the type such as Kraton[®] SEBS (styrene-ethylene/butylene-styrene), SEPS (styrene-
20 ethylene/propylene-styrene), SIS (styrene-isoprene-styrene), or SBS (styrene-butadiene-styrene), and of a "tackifying" compound, in particular a cycloaliphatic hydrocarbon-based resin such as Regalite[®] (Eastman). However, these formulations have a limit in terms of the amount of copolymer with regard to the lack of solubility of these compounds in the galenical media considered for mascaras. Thus, beyond 2% by weight of copolymer, the
25 corresponding cosmetic compositions become too viscous to be compatible with application to the eyelashes.

There thus remains at the present time a need for compositions for caring for and/or making up keratin fibres, and more particularly the eyelashes, which show good stability over time in terms of wear extending beyond two days.

30 There also remains a need for compositions for caring for and/or making up keratin fibres, and more particularly the eyelashes, which have satisfactory charging power, so as to afford a volumizing makeup effect that is particularly sought by users.

The object of the present invention is, precisely, to satisfy these expectations.

Thus, according to one of its aspects, the present invention relates to a composition for caring for and/or making up keratin fibres, and more particularly the eyelashes, comprising, in a physiologically acceptable medium, at least:

- 5 - isododecane,
- 3% by weight, relative to the total weight of the said composition, of elastomeric polymer(s) comprising at least one unit chosen from isoprene, butadiene and/or butylene, and
- a tackifying resin with a number-average molecular weight of less than or
- 10 equal to 10 000 g/mol, chosen from rosin, rosin derivatives, and hydrocarbon-based resins, and mixtures thereof,

the said elastomeric polymer(s) being free of styrene monomer, and having a molecular weight of greater than or equal to 100 000 g/mol and preferably greater than or equal to 1 000 000 g/mol.

15 The invention is especially based on the observation by the inventors that the use of statistical elastomers resulting from the polymerization of isoprene, butadiene and/or butylene, as opposed to the styrene block copolymers considered in the mascara formulations discussed above, can satisfy the abovementioned requirements.

As emerges from the examples hereinbelow, the elastomers under

20 consideration according to the invention have a less gelling nature than styrene block copolymers and can be used in higher contents.

Furthermore, the makeup film formed by the composition according to the invention remains on the eyelashes for several days without crumbling.

Document EP 1 454 621 has already described aqueous cosmetic compositions

25 incorporating a polymer based on polyisoprene in accordance with the present invention. However, the combination of this polymer with a tackifying resin as required according to the invention is not considered therein. Document US 6,323,246, for its part, mentions cosmetic compositions based on polyisoprene resins, which are thus different from the elastomers under consideration according to the invention.

30 According to one particular embodiment of the invention, the elastomeric polymer under consideration according to the invention is a polyisoprene.

It has a molecular mass of greater than 100 000 g/mol, preferably greater than 1 000 000 g/mol and especially ranging from 2 000 000 to 4 000 000 g/mol.

This polymer may or may not be hydrogenated. Preferably, it is an aliphatic hydrocarbon-based compound.

5 According to another particular embodiment of the invention, the associated tackifying resin is a hydrocarbon-based resin. It advantageously has a softening point of greater than 120°C and preferably greater than 130°C.

The compositions according to the invention comprise a physiologically acceptable medium, i.e. a non-toxic medium that may be applied to human keratin fibres
10 and that has a pleasant appearance, odour and feel.

The physiologically acceptable medium is generally adapted to the nature of the support onto which the composition is to be applied, and also to the form in which the composition is to be conditioned.

The compositions according to the invention may thus be in the form of an
15 emulsion obtained by dispersing a fatty phase in an aqueous phase, produced via a direct or indirect route.

They may be simple emulsions obtained by dispersing a fatty phase in an aqueous phase (O/W) or emulsions of multiple emulsion type.

According to one embodiment variant, the compositions are anhydrous.

20 These compositions are prepared according to the usual methods.

According to yet another aspect, a subject of the present invention is a conditioning and application kit comprising a container containing a composition as defined previously and an applicator that is configured to apply the said composition to a keratin material, and in particular keratin fibres, such as the eyelashes or the eyebrows, the
25 said applicator comprising application members, such as bristles or teeth.

According to another aspect, a subject of the present invention is also a process for coating, and especially for making up and/or caring for, keratin fibres, such as the eyelashes or the eyebrows, comprising a step of applying a composition as defined previously to the said keratin fibres.

30

Elastomeric polymer

According to one of its aspects, a composition in accordance with the invention comprises at least 3% by weight, relative to the total weight of the said composition, of elastomeric polymer(s) comprising at least one unit chosen from isoprene, butadiene and/or butylene.

5 Preferably, the elastomeric polymer(s) used in a composition according to the invention result from the polymerization of isoprene, butadiene, butylene or mixtures thereof.

For the purposes of the invention, the term "polymer" means a compound containing at least two repeating units, preferably at least three repeating units and better
10 still ten repeating units.

The term "elastomeric" refers to a supple and deformable compound with an instantaneous recovery R_i of greater than 70%, preferably greater than 80% and preferably greater than 90%, after having undergone an elongation of 100%.

More specifically, the elastomeric nature of the polymer is determined
15 according to the following protocol: a polymer film about 100 μm thick is prepared, from which are cut rectangular specimens 15 mm wide and 80 mm long. This specimen is subjected to a tensile stress using a machine sold by the company Instron, at a temperature of 20°C and at 50% relative humidity. The specimens are drawn at a speed of 50 mm/min and the distance between the jaws is 50 mm, which corresponds to the initial length (to) of
20 the specimen.

The instantaneous recovery R_i is determined in the following manner:

- the specimen is drawn by 100% (E_{max}), i.e. 1 times its initial length;
- the constraint is released by applying a return speed equal to the tensile speed, i.e. 50 mm/min, and the residual elongation of the specimen is measured as a percentage, after
25 returning to zero constraint (E_i).

The percentage instantaneous recovery (R_i) is given by the formula below:

$$R_i = ((E_{\text{max}} - E_i) / E_{\text{max}}) \times 100$$

The elastomeric polymer represents a homo- or copolymer that may be obtained by polymerization of one or more linear and/or branched, preferably
30 polyunsaturated (preferably diunsaturated), $\text{C}_2\text{-C}_{10}$, preferably $\text{C}_2\text{-C}_5$ and preferably $\text{C}_4\text{-C}_5$ alkenes.

Preferably, the elastomeric polymer according to the invention is free of aromatic monomers, especially styrene monomers.

The elastomeric polymer preferably represents a homo- or copolymer that may be obtained by polymerization of one or more linear or branched, C₄-C₅ diunsaturated alkenes.

More preferably, the elastomeric polymer represents a polymer chosen from a polybutylene, a polybutadiene (such as a 1,4-polybutadiene or a 1,2-polybutadiene), a polyisoprene, and copolymers thereof.

According to one particular embodiment, the elastomeric polymer used according to the invention comprises, besides the units chosen from isoprene, butadiene and/or butylene, at least one unit chosen from ethylene, propylene, 1,3-pentadiene and/or isobutylene.

According to one preferred embodiment, the elastomeric polymer is a homopolymer.

Preferably, the elastomeric polymers are chosen from olefin polymers that are amorphous or of controlled and moderate crystallization, and preferably from amorphous polymers.

The elastomeric polymers may have a linear structure or a non-linear structure, for instance a polymer of branched, radial or star structure. Preferably, the elastomeric polymers have a linear structure.

According to a first embodiment, the elastomeric polymer represents a poly(ethylene/butylene) copolymer.

The preferred poly(ethylene/butylenes) are copolymers of 1-butene and of ethylene. They may be represented schematically by the following sequence of units:

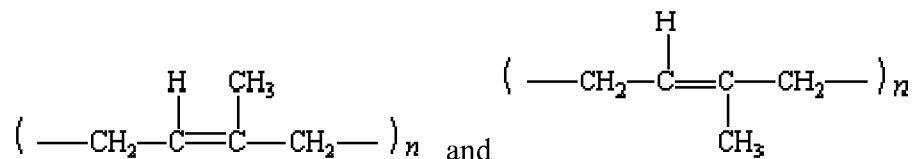
$[-CH_2-CH_2-]$ and $[-CH_2CH(CH_2-CH_3)-]$

According to a second embodiment, the elastomeric polymer is a polybutadiene homopolymer, preferably chosen from a 1,4-polybutadiene or a 1,2-polybutadiene. The polybutadienes may be 1,4-polybutadienes or 1,2-polybutadienes, which may be represented schematically, respectively, by the following sequences of units:

$[-CH_2-CH=CH-CH_2-]$ (1,4-polybutadienes)
 $[-CH_2-CH(CH=CH_2)-]$ (1,2-polybutadienes)

Preferably, the elastomeric polymer used according to the invention is a 1,2-polybutadiene homopolymer.

According to a third preferred embodiment, the elastomeric polymer is a polyisoprene. Polyisoprenes may be represented schematically by the following sequences of units:



A mixture of above units may obviously also be used, so as to form copolymers.

The elastomeric polymer according to the invention may have a content of monomer units of 1,4-cis conformation of greater than or equal to 50%, better still 75%, or even 90% by weight, relative to the total weight of the elastomeric polymer. The content of 1,4-cis conformation is measured according to the conventional ultraviolet or nuclear magnetic resonance methods.

According to one particularly preferred embodiment, the elastomeric polymer of the invention is a polyisoprene.

The polyalkene polymers may be hydrogenated to avoid the risks of crosslinking. Preferably, the polyalkene polymers used in the compositions according to the invention are non-hydrogenated.

The elastomeric polymer preferably has a glass transition temperature (T_g) of between -40°C and -100°C, preferably between -50°C and -90°C and preferably between -50°C and -65°C.

The elastomeric polymer has a molecular mass of greater than 100 000 g/mol, preferably greater than 1 000 000 g/mol and especially ranging from 2 000 000 to 4 000 000 g/mol.

The composition according to the invention comprises at least 3% by weight and in particular from 4% to 25% by weight of elastomeric polymer(s) relative to its total weight.

Such compositions are especially available from the company Kraton in the range Kraton IR, especially the grades Kraton IR 307 and Kraton IR 310, especially the grade Kraton IR 310, which has a molecular weight of about 3 000 000 g/mol.

5 These particular elastomers, when combined with a tackifying resin that is moreover required according to the invention, make it possible to obtain staying-power for the deposits formed on the eyelashes from compositions comprising them.

Tackifying resin

10 The resin used in the composition according to the invention preferably has a number-average molecular weight of less than or equal to 10 000 g/mol, especially ranging from 250 to 10 000 g/mol, preferably less than or equal to 5000 g/mol, especially ranging from 250 to 5000 g/mol, better still less than or equal to 2000 g/mol, especially ranging from 250 to 2000 g/mol and better still less than or equal to 1000 g/mol, especially ranging from 250 to 1000 g/mol.

15 The number-average molecular weights (M_n) are determined by gel permeation liquid chromatography (THF solvent, calibration curve established with linear polystyrene standards, refractometric detector).

Such resins are described especially in the Handbook of Pressure Sensitive Adhesive, edited by Donatas Satas, 3rd edition, 1989, pp. 609-619.

20 The resin of the composition according to the invention may be chosen from rosin, rosin derivatives and hydrocarbon-based resins, which are especially hydrogenated, and mixtures thereof. Preferably, the resin of the composition according to the invention is chosen from hydrocarbon-based resins.

25 Rosin is a mixture predominantly comprising organic acids known as rosin acids (mainly acids of abietic type and of pimaric type).

Three types of rosin exist: rosin ("gum rosin") obtained by incision on live trees, wood rosin, which is extracted from pine wood or stumps, and tall oil ("tall oil rosin"), which is obtained from a by-product originating from the production of paper.

30 Rosin derivatives may be derived in particular from the polymerization, hydrogenation and/or esterification of rosin acids. Rosin derivatives may thus be chosen from rosin esters, in particular derived from polyhydric alcohols such as ethylene glycol or glycerol, pentaerythritol, and more particularly derived from glycerol and pentaerythritol.

Examples that may be mentioned include the rosin esters sold under the reference Foral 85, Pentalyn H and Staybelite Ester 10 by the company Hercules; Sylvatac 95 and Zonester 85 by the company Arizona Chemical, or Unirez 3013 by the company Union Camp.

The said tackifying resin is preferably a hydrocarbon-based polymer, such as an olefin polymer or copolymer, or a polymer or copolymer of aromatic hydrocarbon-based monomers. The said polymer may be hydrogenated, partially hydrogenated or non-hydrogenated. Preferably, the said polymer has a softening point of greater than 120°C and preferably greater than 130°C.

In the context of the present invention, the measurement of the softening point is performed according to the ball and ring method according to ASTM standard D36. NBA 440 automatic equipment available from Normalab is used to do this. The fluid used for the measurement is glycerol.

The hydrocarbon-based resins in accordance with the invention are chosen from polymers that may be classified, according to the type of monomer they comprise, as:

- indene hydrocarbon-based resins, for instance resins derived from the polymerization in major proportion of indene monomer and in minor proportion of a monomer chosen from styrene, methyldiene and methylstyrene, and mixtures thereof. These resins may optionally be hydrogenated. These resins may have a molecular weight ranging from 290 to 1150 g/mol;

Examples of indene resins that may be mentioned include those sold under the reference Norsolene S95, Norsolene S105, Norsolene S115, Norsolene S125, Norsolene S135, Norsolene S145 or Norsolene S155 by the company Cray Valley, or the indene/methylstyrene/hydrogenated styrene copolymers sold under the name Regalite by the company Eastman Chemical, in particular Regalite C6100, Regalite C6100L, Regalite R1090, Regalite R1100, Regalite R7100, Regalite R9100, Regalite S1100, Regalite S5100, Regalite S7125 and Regalite R1125, or under the name Arkon P-90, Arkon P-100, Arkon P-115, Arkon P-125, Arkon P-140, Arkon M-90, Arkon M-100, Arkon M-115 or Arkon M-135 by the company Arakawa;

- aliphatic pentanediene resins, for instance those derived from the majority polymerization of 1,3-pentanediene (trans or cis-piperylene) monomers and of a minor monomer chosen from isoprene, butene, 2-methyl-2-butene, pentene and 1,4-pentanediene,

and mixtures thereof. These resins may have a molecular weight ranging from 1000 to 2500 g/mol;

Such 1,3-pentadiene resins are sold, for example, under the references Piccotac 95 by the company Eastman Chemical, Escorez 1102, Escorez 1304, Escorez 1310LC, Escorez 1315 and Escorez 1401 by the company Exxon Chemicals, or Wingtack 95 by the company Cray Valley;

- mixed resins of pentadiene and of indene, for instance resins which are derived from the polymerization of a mixture of pentadiene and indene monomers such as those described above, for instance the resins sold under the reference Escorez 2101, Escorez 2105, Escorez 2173, Escorez 2184, Escorez 2203LC, Escorez 2394 and Escorez 2510 by the company Exxon Chemicals, Norsolene A 100 by the company Cray Valley, and the resins sold under the reference Wingtack 86, Wingtack Extra and Wingtack Plus by the company Cray Valley;

- polycyclopentadienes such as those sold under the reference Koboguard 5400 sold by the company Kobo;

- diene resins of cyclopentadiene dimers, for instance those derived from the polymerization of first monomers chosen from indene and styrene, and of second monomers chosen from cyclopentadiene dimers such as dicyclopentadiene, methyldicyclopentadiene and other pentadiene dimers, and mixtures thereof. These resins generally have a molecular weight ranging from 500 to 800 g/mol, for instance those sold under the reference Escorez 5380, Escorez 5300, Escorez 5320, Escorez 5490, Escorez 5400, Escorez 5415, Escorez 5690, Escorez 5600, Escorez 5615 or Escorez 5637 by the company Exxon Mobil Chem., and the resins Sukorez SU-90, Sukorez SU-100, Sukorez SU-110, Sukorez SU-120, Sukorez SU-130, Sukorez SU-100S, Sukorez SU-200, Sukorez SU-210, Sukorez SU-220, Sukorez SU-490, Sukorez SU-400 and Sukorez SU-420, by the company Kolon;

- diene resins of isoprene dimers, for instance terpenic resins derived from the polymerization of at least one monomer chosen from pinene, β -pinene and limonene, and mixtures thereof. These resins may have a molecular weight ranging from 300 to 2000 g/mol. Such resins are sold, for example, under the names Piccolyte A115 by the company Hercules, and Zonarez 7100 or Zonatac 105 Lite by the company Arizona Chem;

Mention may also be made of hydrogenated resins derived predominantly from the polymerization of pentanediene, for instance those sold under the name Eastotac H-100E, Eastotac H-115E, Eastotac C-100L, Eastotac C-115L, Eastotac H-100L, Eastotac H-115L, Eastotac C-100R, Eastotac C-115R, Eastotac H-100R, Eastotac H-115R, Eastotac C-100W, Eastotac C-115W, Eastotac H-100W, Eastotac H-115W, Eastotac H-130E, Eastotac H-130L, Eastotac H-130R, Eastotac H-142R, Eastotac H-130W or Eastotac H-142W, by the company Eastman Chemical Co.

According to one particularly preferred embodiment, the tackifying resin used according to the invention is a hydrocarbon-based resin.

Preferably, the hydrocarbon-based resin is hydrogenated.

Preferably, the tackifying resin used according to the invention is derived predominantly from the polymerization of pentanediene.

The tackifying resin(s) may be present in the composition according to the invention in a content ranging from 1% to 30% by weight, preferably from 3% to 20% by weight and more preferentially from 5% to 15% by weight relative to the total weight of the composition.

According to one particular embodiment of the invention, the resin and the elastomeric polymer are advantageously used in a resin(s)/elastomeric polymer(s) weight ratio ranging from 1 to 5 and preferably from 2 to 4.

Liquid fatty phase

As emerges from the foregoing text, a composition according to the invention also comprises a liquid fatty phase formed at least partly from isododecane.

Thus, a composition according to the invention may comprise at least 5% by weight of isododecane and in particular at least 10% by weight, preferably at least 15% by weight and preferentially from 25% to 85% by weight of isododecane relative to its total weight.

The fatty phase of a composition according to the invention may, where appropriate, optionally comprise at least one or more oils or organic solvents other than isododecane.

Oils or organic solvents

For the purposes of the patent application, the term “oil or organic solvent” means a non-aqueous substance, which is liquid at room temperature (25°C) and atmospheric pressure (760 mmHg).

The oil may be chosen from volatile oils and /or non-volatile oils, and mixtures thereof.

The related oil(s) may be present in a content ranging from 1% to 50% by weight and preferably from 5% to 30% by weight relative to the total weight of the composition.

For the purposes of the invention, the term “volatile oil” means an oil that is capable of evaporating on contact with the keratin fibres in less than one hour, at room temperature and atmospheric pressure. The volatile organic solvent(s) and volatile oils of the invention are volatile organic solvents and cosmetic oils that are liquid at room temperature, with a non-zero vapour pressure at room temperature and atmospheric pressure, ranging in particular from 0.13 Pa to 40 000 Pa (10^{-3} to 300 mmHg), in particular ranging from 1.3 Pa to 13 000 Pa (0.01 to 100 mmHg), and more particularly ranging from 1.3 Pa to 1300 Pa (0.01 to 10 mmHg).

The term “non-volatile oil” means an oil that remains on keratin fibres, at room temperature and atmospheric pressure, for at least several hours and that especially has a vapour pressure of less than 10^{-3} mmHg (0.13 Pa).

These oils may be hydrocarbon-based oils, silicone oils or fluoro oils, or mixtures thereof.

Volatile oil

The composition according to the invention may comprise at least one volatile oil.

This volatile oil may be hydrocarbon-based. The hydrocarbon-based volatile oil may be chosen from hydrocarbon-based oils containing from 7 to 16 carbon atoms.

Volatile hydrocarbon-based oils containing from 7 to 16 carbon atoms that may especially be mentioned include branched C₈-C₁₆ alkanes, for instance C₈-C₁₆ isoalkanes (also known as isoparaffins), isodecane, isohexadecane and, for example, the oils sold

under the trade name Isopar or Permethyl, branched C₈-C₁₆ esters, for instance isohexyl neopentanoate, and mixtures thereof.

As a variant or additionally, the composition prepared may comprise at least one volatile silicone oil or solvent that is compatible with cosmetic use.

5 The term "silicone oil" means an oil containing at least one silicon atom, and especially containing Si-O groups. According to one embodiment, the said composition comprises less than 10% by weight of non-volatile silicone oil(s), relative to the total weight of the composition, better still less than 5% by weight, or even is free of silicone oil.

10 Volatile silicone oils that may be mentioned include cyclic polysiloxanes and linear polysiloxanes, and mixtures thereof. Volatile linear polysiloxanes that may be mentioned include hexamethyldisiloxane, octamethyltrisiloxane, decamethyltetrasiloxane, tetradecamethylhexasiloxane and hexadecamethylheptasiloxane. Volatile cyclic polysiloxanes that may be mentioned include hexamethylcyclotrisiloxane,
15 octamethylcyclotetrasiloxane, decamethylcyclopentasiloxane and dodecamethylcyclohexasiloxane.

As a variant or additionally, the composition prepared may comprise at least one volatile fluoro oil.

The term "fluoro oil" means an oil containing at least one fluorine atom.

20 Volatile fluoro oils that may be mentioned include nonafluoromethoxybutane and perfluoromethylcyclopentane, and mixtures thereof.

Non-volatile oils

25 The non-volatile oils may be chosen especially from nonvolatile hydrocarbon-based, fluoro and/or silicone oils.

Non-volatile hydrocarbon-based oils that may especially be mentioned include:

- hydrocarbon-based oils of animal origin,

- hydrocarbon-based oils of plant origin, such as phytostearyl esters, such as phytostearyl oleate, phytostearyl isostearate and lauroyl/octyldodecyl/phytostearyl glutamate (Ajinomoto, Eldew PS203), triglycerides formed from fatty acid esters of
30 glycerol, in particular in which the fatty acids may have chain lengths ranging from C₄ to C₃₆ and especially from C₁₈ to C₃₆, these oils possibly being linear or branched, and

saturated or unsaturated; these oils may especially be heptanoic or octanoic triglycerides, shea oil, alfalfa oil, poppy oil, winter squash oil, millet oil, barley oil, quinoa oil, rye oil, candlenut oil, passionflower oil, shea butter, aloe vera oil, sweet almond oil, peach stone oil, groundnut oil, argan oil, avocado oil, baobab oil, borage oil, broccoli oil, calendula oil, camellina oil, carrot oil, safflower oil, flax oil, rapeseed oil, cotton oil, coconut oil, marrow seed oil, wheatgerm oil, jojoba oil, lily oil, macadamia oil, corn oil, meadowfoam oil, St John's Wort oil, monoi oil, hazelnut oil, apricot kernel oil, walnut oil, olive oil, evening primrose oil, palm oil, blackcurrant pip oil, kiwi seed oil, grapeseed oil, pistachio oil, winter squash oil, pumpkin oil, quinoa oil, musk rose oil, sesame oil, soybean oil, sunflower oil, castor oil and watermelon oil, and mixtures thereof, or alternatively caprylic/capric acid triglycerides, such as those sold by the company Stearineries Dubois or those sold under the names Miglyol 810®, 812® and 818® by the company Dynamit Nobel;

- synthetic ethers containing from 10 to 40 carbon atoms;

- synthetic esters, for instance the oils of formula R_1COOR_2 , in which R_1 represents a linear or branched fatty acid residue containing from 1 to 40 carbon atoms and R_2 represents a hydrocarbon-based chain, which is especially branched, containing from 1 to 40 carbon atoms, on condition that $R_1 + R_2 \geq 10$. The esters may be chosen especially from fatty acid esters of alcohols, for instance:

- cetostearyl octanoate, isopropyl alcohol esters, such as isopropyl myristate, isopropyl palmitate, ethyl palmitate, 2-ethylhexyl palmitate, isopropyl stearate, isopropyl isostearate, isostearyl isostearate, octyl stearate, hydroxylated esters, for instance isostearyl lactate, octyl hydroxystearate, diisopropyl adipate, heptanoates, and especially isostearyl heptanoate, alcohol or polyalcohol octanoates, decanoates or ricinoleates, for instance propylene glycol dioctanoate, cetyl octanoate, tridecyl octanoate, 2-ethylhexyl 4-diheptanoate, 2-ethylhexyl palmitate, alkyl benzoates, polyethylene glycol diheptanoate, propylene glycol 2-diethylhexanoate, and mixtures thereof, C_{12} - C_{15} alcohol benzoates, hexyl laurate, neopentanoic acid esters, for instance isodecyl neopentanoate, isotridecyl neopentanoate, isostearyl neopentanoate, octyldodecyl neopentanoate, isononanoic acid esters, for instance isononyl isononanoate, isotridecyl

isononanoate, octyl isononanoate, hydroxylated esters, for instance isostearyl lactate and diisostearyl malate,

- polyol esters and pentaerythritol esters, for instance dipentaerythritol tetrahydroxystearate/tetraisostearate,

5 - esters of diol dimers and of diacid dimers, such as Lusplan DD-DA5® and Lusplan DD-DA7® sold by the company Nippon Fine Chemical and described in patent application US 2004-175338,

 - copolymers of a diol dimer and of a diacid dimer and esters thereof, such as dilinoleyl diol dimer/dilinoleic dimer copolymers and esters thereof, for instance
10 Plandool-G,

 - copolymers of polyols and of diacid dimers, and esters thereof, such as Hailuscent ISDA,

 - fatty alcohols that are liquid at room temperature, with a branched and/or unsaturated carbon-based chain containing from 12 to 26 carbon atoms, for instance 2-
15 octyldodecanol, isostearyl alcohol, oleyl alcohol, 2-hexyldecanol, 2-butyloctanol and 2-undecylpentadecanol,

 - C₁₂-C₂₂ higher fatty acids, such as oleic acid, linoleic acid and linolenic acid, and mixtures thereof,

 - dialkyl carbonates, the two alkyl chains possibly being identical or different,
20 such as dicaprylyl carbonate sold under the name Cetiol CC® by Cognis,

 - oils of high molar mass, in particular having a molar mass ranging from about 400 to about 10 000 g/mol, in particular from about 650 to about 10 000 g/mol, in particular from about 750 to about 7500 g/mol and more particularly ranging from about 1000 to about 5000 g/mol. As oils of high molar mass that may be used in the present
25 invention, mention may especially be made of oils chosen from:

 - lipophilic polymers,

 - linear fatty acid esters with a total carbon number ranging from 35 to 70,

 - hydroxylated esters,

 - aromatic esters,

30 - esters of C₂₄-C₂₈ branched fatty alcohols or fatty acids,

 - silicone oils,

 - oils of plant origin,

and mixtures thereof.

For example, an oil of high molar mass may be chosen from:

a) lipophilic polymers such as:

- polybutylenes such as Indopol H-100 (of molar mass or MM = 965 g/mol), Indopol H-300 (MM = 1340 g/mol) and Indopol H-1500 (MM = 2160 g/mol) sold or manufactured by the company Amoco,
- polyisobutylenes, for example hydrogenated polyisobutylenes, such as Panalane H-300 E sold or manufactured by the company Amoco (MM = 1340 g/mol), Viseal 20000 sold or manufactured by the company Syntel (MM = 6000 g/mol) and Rewopal PIB 1000 sold or manufactured by the company Witco (MM = 1000 g/mol),
- polydecenes and hydrogenated polydecenes such as: Puresyn 10 (MM = 723 g/mol) and Puresyn 150 (MM = 9200 g/mol) sold or manufactured by the company Mobil Chemicals,

b) esters such as:

- linear fatty acid esters with a total carbon number ranging from 35 to 70, for instance pentaerythrityl tetrapelargonate (MM = 697 g/mol),
- hydroxylated esters such as polyglyceryl-2 triisostearate (MM = 965 g/mol),
- aromatic esters such as tridecyl trimellitate (MM = 757 g/mol),
- esters of C₂₄-C₂₈ branched fatty alcohols or fatty acids, such as those described in patent US 6 491 927 and pentaerythritol esters, and especially triisoarachidyl citrate (MM = 1033.76 g/mol), pentaerythrityl tetraisononanoate (MM = 697 g/mol), glyceryl triisostearate (MM = 891 g/mol), glyceryl tris(2-decyl)tetradecanoate (MM = 1143 g/mol), pentaerythrityl tetraisostearate (MM = 1202 g/mol), polyglyceryl-2 tetraisostearate (MM = 1232 g/mol) or alternatively pentaerythrityl tetrakis(2-decyl)tetradecanoate (MM = 1538 g/mol),
- diol dimer esters and polyesters, such as fatty acid esters of diol dimer, and diacid esters of diol dimer, such as Lusplan DD-DA5® and Lusplan DD-

DA7® sold by the company Nippon Fine Chemical and described in patent application US 2004-175338,

- c) silicone oils such as phenyl silicones, for instance Belsil PDM 1000 from the company Wacker (MM = 9000 g/mol). Other non-volatile silicone oils that may be used in the compositions according to the invention may be non-volatile polydimethylsiloxanes (PDMS), PDMSs comprising alkyl or alkoxy groups that are pendent and/or at the end of a silicone chain, these groups each containing from 2 to 24 carbon atoms, phenyl silicones, for instance phenyl trimethicones, phenyl dimethicones, phenyl trimethylsiloxy diphenylsiloxanes, diphenyl dimethicones, diphenylmethyldiphenyl-trisiloxanes and 2-phenylethyl trimethylsiloxysilicates, and dimethicones or phenyl trimethicones with a viscosity of less than or equal to 100 cSt, and mixtures thereof; and also mixtures of the oils a) and/or b) and/or c).

The fluoro oils that may be used in the invention are especially fluorosilicone oils, fluoro polyethers and fluorosilicones as described in document EP-A-847752.

Besides the abovementioned oils, the composition according to the invention may, of course, comprise one or more solid fatty substances such as waxes or pasty compounds.

However, according to one advantageous embodiment of the invention, a composition according to the invention advantageously comprises less than 5% by weight of waxes relative to its total weight, or even is substantially free of waxes. A very much reduced or even zero amount of wax in fact makes it possible to promote the adhesion of the deposit to the eyelashes.

For the purposes of the present invention, the term “pasty compound” means a fatty compound with a reversible solid/liquid change of state, and comprising at a temperature of 23°C a liquid fraction and a solid fraction.

The pasty compound is advantageously chosen from:

- lanolin and derivatives thereof, such as lanolin alcohol, oxyethylenated lanolins, acetylated lanolin, lanolin esters such as isopropyl lanolate, and oxypropylenated lanolins,

- polymeric or non-polymeric silicone compounds, for instance polydimethylsiloxanes of high molecular masses, polydimethylsiloxanes containing side chains of the alkyl or alkoxy type containing from 8 to 24 carbon atoms, especially stearyl dimethicones,

- polymeric or non-polymeric fluoro compounds,

- vinyl polymers, especially:

- olefin homopolymers,

- olefin copolymers,

- hydrogenated diene homopolymers and copolymers,

- linear or branched oligomers, homopolymers or copolymers of alkyl (meth)acrylates preferably containing a C₈-C₃₀ alkyl group,

- oligomers, homopolymers and copolymers of vinyl esters containing C₈-C₃₀ alkyl groups,

- oligomers, homopolymers and copolymers of vinyl ethers containing C₈-C₃₀ alkyl groups,

- liposoluble polyethers resulting from the polyetherification between one or more C₂-C₁₀₀ and preferably C₂-C₅₀ diols,

- esters and polyesters,

- and mixtures thereof.

The pasty compound(s) may be present in an amount ranging from 0.1% to 20% by weight and especially from 0.5% to 10% by weight relative to the total weight of the composition.

Aqueous phase

A composition according to the invention may comprise an aqueous phase.

The aqueous phase comprises water and/or at least one water-soluble solvent.

In the present invention, the term "water-soluble solvent" denotes a compound that is liquid at room temperature and water-miscible (miscibility with water of greater than 50% by weight at 25°C and atmospheric pressure).

The water-soluble solvents that may be used in the compositions according to the invention may also be volatile.

Among the water-soluble solvents that may be used in the compositions in accordance with the invention, mention may be made especially of lower monoalcohols containing from 1 to 5 carbon atoms such as ethanol and isopropanol, glycols containing from 2 to 8 carbon atoms such as ethylene glycol, propylene glycol, 1,3-butylene glycol and dipropylene glycol, C₃-C₄ ketones and C₂-C₄ aldehydes.

The aqueous phase (water and optionally the water-miscible solvent) is generally present in the composition according to the present patent application in a content ranging from 0.5% to 20% by weight or even ranging from 1% to 15% by weight relative to the total weight of the composition.

However, according to one embodiment, the composition according to the invention is anhydrous.

The term "anhydrous composition" means a composition containing less than 2% by weight of water, or even less than 0.5% by weight of water, and is especially free of water.

Where appropriate, such small amounts of water may especially be introduced by ingredients of the composition that may contain residual amounts thereof.

The compositions according to the invention may also comprise any ingredient conventionally used in the fields under consideration and more especially in the field of mascaras, for instance pigments or naces, fillers and/or fibres.

Pigments and naces

The pigments and naces may be present in the composition in a content ranging from 0.01% to 50% by weight, for example ranging from 0.1% to 30% by weight, for example ranging from 1% to 20% by weight, for example ranging from 5% to 15% by weight, relative to the total weight of the composition.

According to one particular embodiment, a composition according to the invention also comprises at least one pigment.

The term “pigments” should be understood as meaning white or coloured, mineral or organic particles, which are insoluble in an aqueous medium, and which are intended to colour and/or opacify the resulting composition and/or film.

The pigments may be white or coloured, and mineral and/or organic.

5 The pigment may be an organic pigment. The term “organic pigment” means any pigment that satisfies the definition in Ullmann’s encyclopaedia in the chapter on organic pigments. The organic pigment may especially be chosen from nitroso, nitro, azo, xanthene, quinoline, anthraquinone, phthalocyanin, metal complex, isoindolinone, isoindoline, quinacridone, perinone, perylene, diketopyrrolopyrrole, thioindigo, dioxazine, triphenylmethane and quinophthalone compounds.

10 The organic pigment(s) may be chosen, for example, from carmine, carbon black, aniline black, melanin, azo yellow, quinacridone, phthalocyanin blue, sorghum red, the blue pigments codified in the Color Index under the references CI 42090, 69800, 69825, 73000, 74100 and 74160, the yellow pigments codified in the Color Index under the references CI 11680, 11710, 15985, 19140, 20040, 21100, 21108, 47000 and 47005, 15 the green pigments codified in the Color Index under the references CI 61565, 61570 and 74260, the orange pigments codified in the Color Index under the references CI 11725, 15510, 45370 and 71105, the red pigments codified in the Color Index under the references CI 12085, 12120, 12370, 12420, 12490, 14700, 15525, 15580, 15620, 15630, 15800, 20 15850, 15865, 15880, 17200, 26100, 45380, 45410, 58000, 73360, 73915 and 75470, and the pigments obtained by oxidative polymerization of indole or phenolic derivatives as described in patent FR 2 679 771.

 These pigments may also be in the form of composite pigments as described in patent EP 1 184 426. These composite pigments may especially be composed of particles 25 comprising a mineral core at least partially covered with an organic pigment and at least one binder for fixing the organic pigments to the core.

 The pigment may also be a lake. The term “lake” means insolubilized dyes adsorbed onto insoluble particles, the assembly thus obtained remaining insoluble during use.

30 The mineral substrates onto which the dyes are adsorbed are, for example, alumina, silica, calcium sodium borosilicate or calcium aluminium borosilicate, and aluminium.

Among the organic dyes that may be mentioned is cochineal carmine. Mention may also be made of the products known under the following names: D&C Red 21 (CI 45 380), D&C Orange 5 (CI 45 370), D&C Red 27 (CI 45 410), D&C Orange 10 (CI 45 425), D&C Red 3 (CI 45 430), D&C Red 4 (CI 15 510), D&C Red 33 (CI 17 200), D&C Yellow 5 (CI 19 140), D&C Yellow 6 (CI 15 985), D&C Green (CI 61 570), D&C Yellow 1 O (CI 77 002), D&C Green 3 (CI 42 053), D&C Blue 1 (CI 42 090).

An example of a lake that may be mentioned is the product known under the following name: D&C Red 7 (CI 15 850:1).

The pigment may be a mineral pigment. The term "mineral pigment" means any pigment that satisfies the definition in Ullmann's encyclopaedia in the chapter on inorganic pigments. Among the mineral pigments that are useful in the present invention, mention may be made of zirconium oxide or cerium oxide, and also zinc oxide, iron oxide (black, yellow or red) or chromium oxide, manganese violet, ultramarine blue, chromium hydrate and ferric blue, titanium dioxide, and metal powders, for instance aluminium powder or copper powder. The following mineral pigments may also be used: Ta₂O₅, Ti₃O₅, Ti₂O₃, TiO, ZrO₂ as a mixture with TiO₂, ZrO₂, Nb₂O₅, CeO₂, ZnS.

The size of the pigment that is useful in the context of the present invention is generally between 10 nm and 10 µm, preferably between 20 nm and 5 µm and more preferentially between 30 nm and 1 µm.

The term "nacres" or "nacreous pigments" should be understood as meaning coloured particles of any form, which may or may not be iridescent, especially produced by certain molluscs in their shell or else synthesized, and which have a colour effect via optical interference.

The nacres may be chosen from white nacreous pigments such as mica coated with titanium or with bismuth oxychloride, coloured nacreous pigments such as titanium mica with iron oxides, titanium mica especially with ferric blue or chromium oxide, titanium mica with an organic pigment of the abovementioned type, and also nacreous pigments based on bismuth oxychloride.

Fillers

The composition according to the invention may also comprise at least one filler. These fillers serve especially to modify the rheology or the texture of the composition.

The fillers may be mineral or organic and of any shape, platelet-shaped, spherical or oblong, irrespective of the crystallographic form (for example lamellar, cubic, hexagonal, orthorhombic, etc.). Mention may be made of talc, mica, silica, silica surface-treated with a hydrophobic agent, kaolin, polyamide (Nylon[®]) powder (Orgasol[®] from Atochem), poly- β -alanine powder and polyethylene powder, powders of tetrafluoroethylene polymers (Teflon[®]), lauroyllysine, starch, boron nitride, hollow polymer microspheres such as those of polyvinylidene chloride/acrylonitrile, for instance Expancel[®] (Nobel Industrie) or of acrylic acid copolymers (Polytrap[®] from the company Dow Corning) and silicone resin microbeads (Tospearls[®] from Toshiba, for example), elastomeric polyorganosiloxane particles, precipitated calcium carbonate, magnesium carbonate, magnesium hydrogen carbonate, hydroxyapatite, hollow silica microspheres (Silica Beads[®] from Maprecos), glass or ceramic microcapsules, and metal soaps derived from organic carboxylic acids containing from 8 to 22 carbon atoms and preferably from 12 to 18 carbon atoms, for example zinc stearate, magnesium stearate or lithium stearate, zinc laurate or magnesium myristate.

It is also possible to use a compound that is capable of swelling on heating, and especially heat-expandable particles such as non-expanded microspheres of vinylidene chloride/acrylonitrile/methyl methacrylate copolymer or of acrylonitrile homopolymer or copolymer, for instance those sold, respectively, under the references Expancel[®] 820 DU 40 and Expancel[®] 007WU by the company Akzo Nobel.

The fillers may represent from 0.1% to 25% by weight and in particular from 0.2% to 20% by weight relative to the total weight of the composition.

Fibres

The compositions in accordance with the invention may also comprise at least one fibre, especially for obtaining an improvement in the lengthening effect.

The term "fibre" should be understood as meaning an object of length L and of diameter D such that L is greater than D and preferably very much greater than D, D being the diameter of the circle in which the cross section of the fibre is inscribed. In particular,

the ratio L/D (or aspect ratio) is chosen in the range from 3.5 to 2500, preferably from 5 to 500 and better still from 5 to 150.

The fibres that may be used in the composition of the invention may be mineral or organic fibres, of synthetic or natural origin. They may be short or long, individual or
5 organized, for example braided, and hollow or solid. They may have any shape and may especially have a circular or polygonal (square, hexagonal or octagonal) cross section depending on the specific application envisaged. In particular, their ends are blunted and/or polished to prevent injury.

In particular, the fibres have a length ranging from 1 μm to 10 mm, preferably
10 from 0.1 mm to 5 mm and better still from 0.3 mm to 3 mm. Their cross section may be included in a circle with a diameter ranging from 2 nm to 500 μm , preferably ranging from 100 nm to 100 μm and better still from 1 μm to 50 μm . The weight or yarn count of fibres is often given in denier or decitex and represents the weight in grams per 9 km of yarn. Preferably, the fibres according to the invention have a yarn count chosen in the range
15 from 0.01 to 10 denier, preferably from 0.1 to 2 denier and better still from 0.3 to 0.7 denier.

The fibres that may be used in the compositions according to the invention may be chosen from rigid or non-rigid fibres, and may be of synthetic or natural, mineral or organic origin.

20 Moreover, the fibres may or may not be surface-treated, may be coated or uncoated, and may be coloured or uncoloured.

As fibres that may be used in the compositions according to the invention, mention may be made of non-rigid fibres such as polyamide (Nylon[®]) fibres or rigid fibres such as polyimideamide fibres, for instance those sold under the names Kermel[®] and
25 Kermel Tech[®] by the company Rhodia or poly(p-phenyleneterephthalamide) (or aramid) fibres sold especially under the name Kevlar[®] by the company DuPont de Nemours.

The fibres may be present in a content ranging from 0.01% to 10% by weight, in particular from 0.1% to 5% by weight and more particularly from 0.3% to 3% by weight relative to the total weight of the composition.

30

The compositions according to the invention may also comprise any cosmetic active agent, such as active agents chosen from antioxidants, preserving agents, fragrances,

bactericidal active agents, neutralizers, emollients, moisturizers, thickeners, trace elements, softeners, sequestrants, acidifying or basifying agents, hydrophilic or lipophilic active agents, coalescers, plasticizers, vitamins, and screening agents, in particular sunscreens, and mixtures thereof.

5 Needless to say, a person skilled in the art will take care to select the optional additional compounds and/or the amount thereof such that the advantageous properties of the composition used according to the invention are not, or are not substantially, adversely affected by the envisaged addition.

10 CONDITIONING

The composition according to the invention may be conditioned in a container delimiting at least one compartment that comprises the said composition, the said container being closed by a closing member.

15 Closing member

The closing member may be in the form of a removable stopper, a lid, a cap, a tear-off strip or a capsule, especially of the type comprising a body attached to the container and a cover cap articulated on the body. It may also be in the form of a member ensuring the selective closure of the container, especially a pump, a valve or a clapper.

20

Container

The container may be in any suitable form. It may especially be in the form of a bottle, a tube, a jar, a case, a box, a sachet or a carton.

25 The container may be combined with an applicator as detailed below, especially in the form of a brush.

30 The product may be contained directly in the container, or indirectly. By way of example, the product may be arranged on an impregnated support, especially in the form of a wipe or a pad, and arranged (individually or in plurality) in a box or in a sachet. Such a support incorporating the product is described, for example, in patent application WO 01/03538.

The closing member may be coupled to the container by screwing. Alternatively, the coupling between the closing member and the container is done other

than by screwing, especially via a bayonet mechanism, by click-fastening or by gripping. The term “click-fastening” in particular means any system involving the crossing of a bead or cord of material by elastic deformation of a portion, especially of the closing member, followed by return to the elastically unconstrained position of the said portion after the crossing of the bead or cord.

The container may be at least partially made of thermoplastic material. Examples of thermoplastic materials that may be mentioned include polypropylene or polyethylene.

Alternatively, the container is made of non-thermoplastic material, especially glass or metal (or alloy).

The container may have rigid or deformable walls, especially in the form of a tube or a tube bottle.

The container may comprise means for initiating or facilitating the distribution of the composition. By way of example, the container may have deformable walls so as to allow the composition to exit in response to a positive pressure inside the container, this positive pressure being caused by elastic (or non-elastic) squeezing of the walls of the container.

The container may be equipped with a drainer arranged in the region of the aperture of the container. Such a drainer makes it possible to wipe the applicator and possibly the rod to which it may be securely fastened. Such a drainer is described, for example, in patent FR 2 792 618.

Applicator

The applicator may be in various forms. It may especially be in the form of a brush comprising an arrangement of bristles maintained by a twisted wire. Such a twisted brush is described especially in patent US 4,887,622.

It may also be in the form of a comb comprising a plurality of application members, obtained especially by moulding. Such combs are described, for example, in patent FR 2 796 529.

The applicator may be in the form of a fine brush, as described, for example, in patent FR 2 722 380.

The applicator may be in the form of a block of foam or of elastomer. The applicator may be free (sponge) or securely fastened to a rod borne by the closing member,

as described, for example, in patent US 5,492,426. The applicator may be securely fastened to the container, as described, for example, in patent FR 2 761 959.

The composition according to the present invention is particularly advantageous when it is used with an applicator of brush type comprising an arrangement of bristles maintained by a twisted wire or of injected type, mainly having a core and teeth integrally attached. Specifically, as outlined above, applicators of this type, and more particularly such applicators having the property of being soft, may be adapted for the application of the compositions according to the present invention, over time, without observing the drawbacks reported hereinabove.

In the case of brushes, the softness results from various parameters that may be associated with the nature of the bristles, their cross section, their diameter, their length and their density, inter alia.

In the context of the present invention, the application members and more particularly the "soft" bristles are those that have limited resistance to flexure, whereas the "hard" application members are defined as being those that have a substantially higher resistance to flexure.

By way of illustration, and all the parameters being otherwise equal, a short application member is harder than a long application member, and a thick application member is harder than a finer application member. Furthermore, hollow application members are softer than solid application members. In general, there exists for the application members a diameter below which they are considered as soft and above which they are considered as hard.

For example, in the case of bristles formed from nylon or polyester fibres, the relatively soft bristles have a diameter of less than 10 hundredths of a millimetre, whereas the relatively stiff bristles have a diameter of greater than 10 hundredths of a millimetre and generally less than 30 hundredths of a millimetre.

For example, the bristles or teeth may be made from more or less soft materials. The hardness of these materials may be compared by means of the Shore hardness values. The bristles may be natural or synthetic. They may be made by extrusion of a plastic, such as PE, PA, especially PA6, PA6/6, PA6/10 or PA6/12, Hytel®, Pebax®, silicone or PU, this list not being limiting. Such application members may, for example, have a hardness of between 20 Shore A and 40 Shore D.

Bristles with a cross section that is circular or other than circular may be used. It is possible, for example, to use bristles of circular cross section with a diameter of between 50 and 300 hundreds of a millimetre.

According to one particular embodiment, a composition according to the
5 invention may be a composition intended to be applied to the eyelashes, also known as a "mascara". It may be a makeup composition, a base coat cosmetic composition, or a composition to be applied over a base coat cosmetic composition, also known as a top coat. The mascara is more particularly intended for human eyelashes, but also false eyelashes.

The compositions used according to the invention may be manufactured via the
10 known processes, generally used in the field of cosmetics.

The invention is illustrated in greater detail in the examples that follow, which are given as non-limiting illustrations of the invention.

15 **EXAMPLES**

In the examples, the weight percentages are indicated relative to the total weight of the composition.

Example 1: Mascara according to the invention

Compound/Commercial reference	weight%
Polyisoprene (molecular weight of about 3 000 000 g/mol)/Kraton IR 310	4.5
Aliphatic hydrocarbon-based resin (obtained from the polymerization of pentanediene)/Eastotac H142W from Eastman	13.5
Distearyldimethylammonium-modified hectorite/Bentone 38 VCG from Elementis	3
Propylene carbonate	1
Black iron oxide	3
Isododecane	75

Protocol for preparing the composition

The elastomeric polymer, the tackifying resin and the isododecane are mixed together and placed in a closed glass bottle. The glass bottle is placed for 1 month at 60°C and is shaken manually every three days. A homogeneous solution is then obtained.

5 The propylene carbonate, the Bentone and the pigment are then added to the bottle. The whole is agitated for 20 minutes until a homogeneous mixture is obtained. Equipment of Rayneri type is used to do this.

 The composition obtained is applied to eyelashes using a Lash Architect WPF[®] applicator sold by the company L'Oréal. A black deposit that dries quickly and that
10 remains on the eyelashes for several days is obtained.

For comparative purposes, a control composition was prepared, as follows:

Compound/Commercial reference	weight%
Styrene-ethylene/butylene-styrene triblock copolymer (molecular weight of about 74 000 g/mol)/Kraton G-1650 from Kraton	4.5
Aliphatic hydrocarbon-based resin/Eastotac H142W from Eastman	13.5
Isododecane	82

 The corresponding composition proves to be of excessively high consistency,
15 and, in this respect, is incompatible with application to the eyelashes.

CLAIMS

1. Cosmetic composition for caring for and/or making up keratin fibres, and more particularly the eyelashes, comprising, in a physiologically acceptable medium, at least:

- 5 - isododecane,
 - 3% by weight, relative to the total weight of the said composition, of elastomeric polymer(s) comprising at least one unit chosen from isoprene, butadiene and/or butylene, and
 - a tackifying resin with a number-average molecular weight of less than or
10 equal to 10 000 g/mol, chosen from rosin, rosin derivatives, and hydrocarbon-based resins, and mixtures thereof,

 the said elastomeric polymer(s) being free of styrene monomer, and having a molecular weight of greater than or equal to 100 000 g/mol and preferably greater than or equal to 1 000 000 g/mol.

- 15 2. Composition according to Claim 1, in which the said elastomeric polymer is a polyisoprene.

 3. Composition according to Claim 1 or 2, comprising from 4% to 25% by weight of elastomeric polymer(s), relative to its total weight.

4. Composition according to any one of the preceding claims, in which the
20 rosin derivatives are chosen from rosin esters, in particular derived from glycerol or from pentaerythritol, and the hydrocarbon-based resins are chosen from hydrogenated resins, chosen especially from indene hydrocarbon-based resins, pentanediene aliphatic resins, mixed resins of pentanediene and indene, diene resins of cyclopentanediene dimers, hydrogenated resins derived from the polymerization of pentanediene, and diene resins of
25 isoprene dimers, and mixtures thereof.

 5. Composition according to any one of the preceding claims, in which the said tackifying resin is a hydrocarbon-based resin, which is preferably hydrogenated.

 6. Composition according to any one of the preceding claims, in which the said tackifying resin is predominantly derived from the polymerization of pentanediene.

7. Composition according to any one of the preceding claims, comprising from 1% to 30% by weight of tackifying resin(s), relative to its total weight, preferably from 3% to 20% by weight and more preferentially from 5% to 15% by weight.

5 8. Composition according to any one of the preceding claims, in which the resin and the elastomeric polymer are used in a resin(s)/elastomeric polymer(s) weight ratio ranging from 1 to 5 and preferably from 2 to 4.

9. Composition according to any one of the preceding claims, comprising at least 5% by weight of isododecane, in particular at least 10% by weight, preferably at least 15% by weight and preferentially from 25% to 85% by weight of isododecane relative to
10 its total weight.

10. Composition according to any one of the preceding claims, characterized in that it also comprises at least one pigment.

11. Process for coating keratin fibres, such as the eyelashes or the eyebrows, comprising a step of applying a composition according to any one of Claims 1 to 10 to the
15 said keratin fibres.

INTERNATIONAL SEARCH REPORT

International application No
PCT/IB2011/053191

A. CLASSIFICATION OF SUBJECT MATTER

INV. A61K8/31 A61K8/81 A61K8/97 A61Q1/10
ADD.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

A61K A61Q

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 1 834 633 A2 (OREAL [FR]) 19 September 2007 (2007-09-19) paragraphs [0003], [0004]; claims 1-23; examples 1-4	1,11
X	EP 1 454 621 A2 (INTERCOS S P A [IT]) 8 September 2004 (2004-09-08) paragraphs [0001], [0002], [0008] - [0011]; claims 1,2,6; examples 1-10	1
X	EP 1 743 626 A1 (OREAL [FR]) 17 January 2007 (2007-01-17) paragraphs [0001], [0007], [0010], [0014], [0017], [0018], [0019] - [0022], [0057] - [0061]; claims 1,7,20-24,33; examples 1-7	1
	-/--	



Further documents are listed in the continuation of Box C.



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

"E" earlier document but published on or after the international filing date

"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)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

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Date of the actual completion of the international search

20 September 2011

Date of mailing of the international search report

11/10/2011

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INTERNATIONAL SEARCH REPORT

International application No
PCT/IB2011/053191

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