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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: ANTIPERSPIRANT AND/OR DEODORANT COMPOSITIONS

(57) Abstract: A clear emulsion and gel-type cosmetic composition is described, and in particular an antiperspirant and/or deodorant composition which comprises a water-in-oil emulsion comprising: a) about 65 % to about 75 % of an aqueous solution of an effective amount of antiperspirant active; b) about 25 % to about 35 % of an oil phase consisting of silicones, emollients and a silicone emulsifying agent, and comprising at least one volatile silicone, at least one non-volatile ester or at least one non-volatile silicone, and wherein at least one oil phase soluble ingredient has a refractive index of about 1.40 to about 1.50; c) about 0.01 to about 8.5 % of a coupling agent; and d) at least one polymeric ethylene oxide glycol adduct which component raises the refractive index of said aqueous solution, and optionally another water soluble, non-simple glycol component which raises the refractive index of said aqueous solution; in which said composition is essentially free of simple glycols and low and middle chain alcohols.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 A61K7/32

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

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 97 06777 A (THE MENNEN COMPANY) 27 February 1997 (1997-02-27) the whole document & US 6 007 799 A 28 December 1999 (1999-12-28) cited in the application ---	1-3
Y	WO 92 05767 A (THE GILLETTE COMPANY) 16 April 1992 (1992-04-16) cited in the application the whole document ---	1-3
Y	WO 98 43605 A (COLGATE-PALMOLIVE COMPANY) 8 October 1998 (1998-10-08) page 12 -page 13 example 1; table IAB -----	1-3

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

☒ Patent family members are listed in 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

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

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FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Present claims 1-3 relate to a component of a solution (a non-glycol ingredient) defined by reference to a desirable characteristic, namely that this compound raises the refractive index of the solution. Claims 1, 3 cover all compounds having this characteristic or property, whereas the application provides support within the meaning of Article 6 PCT and disclosure within the meaning of Article 5 PCT for only a very limited number of such compounds, which are the specific non-glycol compounds cited in claim 2

Present claim 3 relates to a composition defined by reference to a desirable property, namely having a refractive index between 1,4095 and 1,4200. An attempt is made to define the composition by reference to a result to be achieved. This lack of clarity in the present case is such as to render a meaningful search over the whole of the claimed scope impossible.

Present claims 1-3 relate to a compound defined by reference to a desirable characteristic, namely that this compound acts as emollient. The claims cover all compounds having this property, whereas the application provides support within the meaning of Article 6 PCT and disclosure within the meaning of Article 5 PCT for only a very limited number of such compounds, which are the emollients mentioned in the description, page 12 first paragraph and page 13 first paragraph.

Present claims 1-3 relate to a compound defined by reference to a desirable characteristic, namely that this compound has a refractive index of 1.39 to 1.50. The claims cover all compounds having this property, whereas the application provides support within the meaning of Article 6 PCT and disclosure within the meaning of Article 5 PCT for only a very limited number of such compounds, which are the compounds mentioned in the description, page 12 first paragraph.

Present claims 2,3 relate to an extremely large number of possible compounds, namely the non-glycol ingredient defined as being a divalent or trivalent salt. Support within the meaning of Article 6 PCT and disclosure within the meaning of Article 5 PCT is to be found, however, for only a very small proportion of the compounds claimed, which are the specific salts mentioned in claim 2 after the word "including".

In the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible. Consequently, the search has been carried out for those parts of the claims which appear to be supported and disclosed, namely

a clear water-in-oil emulsion and gel-type cosmetic composition comprising:

a) 65%-75% of an aqueous phase solution having dissolved therein an antiperspirant active

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

b) 25%-35% of an oil phase consisting of silicones (at least one volatile), emollients chosen among those described in pages 12 and 13 first paragraphs and silicone emulsifying agent, containing at least one non-volatile ester or one non volatile silicone

c) 0.01%-8.5% of coupling agent chosen from the compounds listed in the description, pages 13 and 14

and

c) a compound to raise the refractive index of the aqueous solution chosen among the compounds specified in claim 2 by their specific chemical name, i.e., not extending the search to any possible , divalent or trivalent salts

wherein the composition contains less than 1% of glycols and low and middle chain alcohols.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

INTERNATIONAL SEARCH REPORT

Information on patent family members

In International Application No

PCT/EP 01/05122

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 9706777	A	27-02-1997	AU 711443 B2	14-10-1999
			AU 6718296 A	12-03-1997
			BR 9610156 A	05-10-1999
			CA 2229742 A1	27-02-1997
			EP 0845977 A1	10-06-1998
			WO 9706777 A1	27-02-1997
			US 6007799 A	28-12-1999
			ZA 9606814 A	12-02-1998
WO 9205767	A	16-04-1992	AT 177318 T	15-03-1999
			CA 2069747 A1	05-04-1992
			DE 69130978 D1	15-04-1999
			DE 69130978 T2	09-09-1999
			DK 504372 T3	27-09-1999
			EP 0504372 A1	23-09-1992
			ES 2128325 T3	16-05-1999
			FI 922563 A	03-06-1992
			GR 3029651 T3	30-06-1999
			MX 9101423 A1	05-06-1992
			NO 922190 A	03-06-1992
			WO 9205767 A1	16-04-1992
			US 5587153 A	24-12-1996
			US 5863525 A	26-01-1999
WO 9843605	A	08-10-1998	US 5972319 A	26-10-1999
			AU 735344 B2	05-07-2001
			AU 6592198 A	22-10-1998
			BR 9808448 A	23-05-2000
			EP 0973492 A1	26-01-2000
			HU 0001413 A2	28-09-2000
			PL 335940 A1	22-05-2000
			WO 9843605 A1	08-10-1998
			ZA 9802661 A	30-09-1999