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Declarations under Rule 4.17:

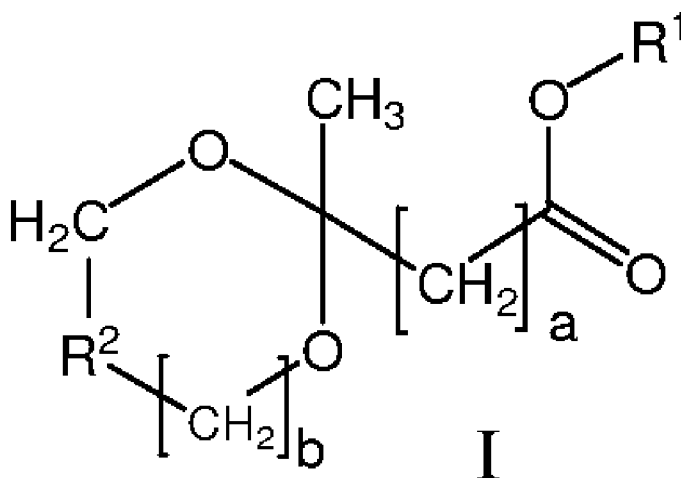
- as to applicant's entitlement to apply for and be granted
a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of
the earlier application (Rule 4.17(iii))

Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments (Rule 48.2(h))

[Continued on next page]

(54) Title: PERSONAL CARE FORMULATIONS CONTAINING ALKYL KETAL ESTERS AND METHODS OF MANUFACTURE



(57) Abstract: Personal care formulations containing alkyl ketal esters having the structure (I) wherein a is 0 or an integer of 1 to 12; b is 0 or 1; R² is a divalent C₁₋₈ group optionally substituted with up to 5 hydroxyl groups; and R¹ is C₁₋₆ alkyl.

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A. CLASSIFICATION OF SUBJECT MATTER

A61K 8/49(2006.01)i, A61K 8/35(2006.01)i, A61K 8/33(2006.01)i, A61K 9/06(2006.01)i, A61Q 19/02(2006.01)i, A61Q 19/00(2006.01)i, A61Q 1/00(2006.01)i

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 8/49; C07D 319/06; C07C 33/025; C07D 317/30; A61K 8/34

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

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

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

eKOMPASS(KIPO internal) & Keywords: alkyl ketal ester, active agent, personal care, LGK, LPK, wax, emulsion, oil, aqueous phase

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2008-046795 A1 (SYMRISE GMBH & CO. KG et al.) 24 April 2008 See pages 9-19, 37, 41 and claims 1, 3, 6	1-5, 19-22, 24-26 , 29-31
X A	WO 2009-065244 A1 (GIVAUDAN SA et al.) 28 May 2009 See abstract, page 12 and claims 1, 3-4	29-31 1-5, 19-22, 24-26
A	US 2008-0242721 A1 (SELIFONOV, SERGEY) 02 October 2008 See abstract, paragraphs [0087], [0088], [0109]	1-5, 19-22, 24-26 , 29-31
A	WO 2010-036884 A1 (SEGETIS, INC. et al.) 01 April 2010 See abstract and claim 1	1-5, 19-22, 24-26 , 29-31

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 application or patent 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 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

30 JANUARY 2012 (30.01.2012)

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Name and mailing address of the ISA/KR

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Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.: 12
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

Claim 12 cannot be searched because they refer to multiple dependent claims not to be drafted in accordance with the second and third sentences of Rule 6.4(a).

3. Claims Nos.: 6-11, 13-18, 23, 27, 28, 32-35
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.

2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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