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(71) Applicant:

THE PROCTER & GAMBLE COMPANY Cincinnati, Ohio 45202 (US)

(72) Inventors:

 Del Duca, Valerio (NMN) 80064 Massalubrense (Napoli) (IT)

- Ricci, Carlo (NMN) 00151 Rome (IT)
- Scaramella, Roberto (NMN) 00153 Rome (IT)
- (74) Representative:

Engisch, Gautier et al BVBA Procter & Gamble Europe SPRL, Temselaan 100 1853 Strombeek-Bever (BE)

(54) Liquid aqueous bleaching compositions

(57) The present invention relates to a liquid aqueous composition having a viscosity of 1 cps to 100 cps when measured with a Brookfield viscometer at spindle 2, rpm 30 and 20°C, and comprising a peroxygen bleach, from 0.001% to 30% by weight of the total composition of an ethoxylated nonionic surfactant, from 0.001% to 20% by weight of a zwitterionic betaine surfactant and a viscosity controlling agent selected from the group consisting of:

- C3-C6 alkyl ammonium salt,
- glycol according to the formula:

$$R_1-O-(C_x-H_{2x})_n-R_2$$

wherein R_1 is a saturated or unsaturated, substituted or unsubstituted, linear or branched alkyl group containing from 1 to 5 carbon atoms, R_2 is hydrogen or a saturated or unsaturated, substituted or unsubstituted, linear or branched alkyl group containing from 1 to 5 carbon atoms, x ranges from 2 to 4 and n ranges from 1 to 5;

- an alcohol having the formula R_a-OH wherein R_a is a linear or branched, saturated or unsaturated alkyl group containing from 3 to 8 carbon atoms,
- an aromatic alcohol according to the formula R_b-OH wherein R_b is an alkyl substituted or non-alkyl substituted aryl group containing from 5 to 15 car-

bon atoms, and mixtures thereof. These compositions are suitable to deliver improved stain removal performance and improved bleaching performance when used to pretreat fabrics while delivering low viscosity.



EUROPEAN SEARCH REPORT

Application Number EP 97 87 0152

| | DOCUMENTS CONSIDE | | | | | |
|---|--|--|--|--|--|--|
| Category | Citation of document with inc of relevant passa | | Relevant to claim | CLASSIFICATION OF THE APPLICATION (Int.CI.6) | | |
| E | EP 0 843 001 A (PROC 20 May 1998 * page 6, line 35 - * page 9, line 16 - * claims 1-15 * | page 8, line 35 * | 1-13 | C11D3/39 C11D1/72 C11D1/90 C11D1/62 C11D3/20 C11D1/94 | | |
| Α | * | - column 13, line 29 | 1-13 | | | |
| Α | EP 0 624 640 A (PROC 17 November 1994 * page 5, line 30 - | | 1-13 | | | |
| Α | DATABASE WPI Section Ch, Week 972 Derwent Publications Class A97, AN 97-276 XP002095375 & JP 09 100492 A (LI , 15 April 1997 * abstract * | Ltd., London, GB; 878 | 1-13 | TECHNICAL FIELDS SEARCHED (Int.CI.6) | | |
| Α | DATABASE WPI Section Ch, Week 971 Derwent Publications Class A97, AN 97-188 XP002095376 & JP 09 048998 A (KA, 18 February 1997 * abstract * | 1-13 | | | | |
| | The present search report has be | een drawn up for all claims | 1 | | | |
| | Place of search | | Examiner | | | |
| | THE HAGUE | 3 March 1999 | Ric | hards, M | | |
| X : parti Y : parti docu A : tech O : non | ATEGORY OF CITED DOCUMENTS icularly relevant if taken alone icularly relevant if combined with another ment of the same category inological background written disclosure mediate document | T: theory or princip E: earlier patent dc after the filing dc b: document cited c: document cited dc: member of the second | le underlying the icument, but publiste in the application for other reasons | invention shed on, or | | |

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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 97 87 0152

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

03-03-1999

| Patent document cited in search report | | Publication date | Patent family member(s) | | Publication date |
|--|---|---------------------|----------------------------|-------------|------------------|
| EP 0843001 | Α | 20-05-1998 | AU | 5176398 A | 03-06-199 |
| | | | WO | 9821299 A | 22-05-19 |
| US 4830782 | Α | 16-05-1989 | AU | 2141488 A | 02-03-19 |
| | | | BE | 1002928 A | 27-08-19 |
| | | | CA | 1325575 A | 28-12-19 |
| | | | CH | 678533 A | 30-09-19 |
| | | | DE | 3829087 A | 30-03-19 |
| | | | DK | 483388 A | 01-03-19 |
| | | | FR | 2619823 A | 03-03-19 |
| | | | GB | 2209342 A,B | 10-05-19 |
| | | | JP | 1126399 A | 18-05-19 |
| | | | LU | 87328 A | 08-03-19 |
| | | | NL | 8802145 A | 16-03-19 |
| | | | PH | 26194 A | 18-03-19 |
| | | | SE | 8803003 A | 01-03-19 |
| EP 0624640 | A | 17-11-1994 | US | 5419847 A | 30-05-19 |
| | | | JP | 7003293 A | 06-01-19 |

FORM P0459

o For more details about this annex : see Official Journal of the European Patent Office, No. 12/82