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(71) Applicant: **Henkel AG & Co. KGaA**
40589 Düsseldorf (DE)

(72) Inventors:
- **MARZOUK, Ashraf**
  Cairo (EG)
- **OSMAN, Walaa**
  Dubai (AE)
- **ZEIN ALABDIN, Seba**
  Dubai (AE)
- **KARSTEN, Stefan**
  51645 Gummersbach (DE)
- **ABDELGHANY, Mohamed**
  Dubai (AE)

(54) **METHOD TO PREVENT DISCOLORATION OF COLORED LIQUIDS**

(57) The present invention relates to a method of reducing destruction of colorant dye in a liquid composition in a bottle that is permeable for UV light which method comprises adding organic phosphonic acid compound to said composition.

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EUROPEAN SEARCH REPORT

Application Number
EP 16 15 2573

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X,D	WO 00/43486 A1 (PROCTER & GAMBLE [US]; FOLEY PETER ROBERT [US]; SONG BRIAN X [US]; PIE) 27 July 2000 (2000-07-27)	1-7,9, 11,12	INV. C11D3/36 C11D3/40
Y	* claims 1,3,5,6,9 * * page 1, paragraphs 1,4 * * page 3, paragraph 3 - page 4, paragraph 4 * * page 8, paragraph 5 * * examples 2,3 *	8	
X	EP 0 745 663 A1 (PROCTER & GAMBLE [US]) 4 December 1996 (1996-12-04) * page 2, lines 52-54 * * page 6, lines 7-17 * * page 7 example composition #1- #3 * * page 8 composition #1 * * claims 1,5,7 *	1-7,9,10	
X	US 2003/216282 A1 (MARTENS VERA MARIA [BE] ET AL) 20 November 2003 (2003-11-20) * claims 1,3; examples I-XIV * * page 3, paragraph 0034 * * page 6, paragraph 0064-0066 *	1,2,5-7, 9	TECHNICAL FIELDS SEARCHED (IPC) C11D
Y	US 2014/193887 A1 (HIMMRICH JOHANNES [DE] ET AL) 10 July 2014 (2014-07-10) * page 6, paragraph 0096-0097 * * page 5, paragraph 0074 * * page 7, paragraph 0109 *	8	

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	22 September 2016	Gault, Nathalie

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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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
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22-09-2016

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 0043486 A1	27-07-2000	AT 248906 T	15-09-2003
		CA 2358871 A1	27-07-2000
		DE 60004965 D1	09-10-2003
		DE 60004965 T2	22-07-2004
		EP 1144583 A1	17-10-2001
		ES 2204523 T3	01-05-2004
		JP 2002535448 A	22-10-2002
		WO 0043486 A1	27-07-2000
EP 0745663 A1	04-12-1996	CA 2222631 A1	05-12-1996
		EP 0745663 A1	04-12-1996
		JP 2001503072 A	06-03-2001
		WO 9638377 A1	05-12-1996
US 2003216282 A1	20-11-2003	AR 040026 A1	09-03-2005
		AU 2003230410 A1	02-12-2003
		BR 0310048 A	15-02-2005
		CN 1653169 A	10-08-2005
		EP 1504082 A1	09-02-2005
		MA 27201 A1	03-01-2005
		MX PA04011328 A	14-02-2005
		US 2003216282 A1	20-11-2003
		US 2006030515 A1	09-02-2006
		WO 03097781 A1	27-11-2003
		ZA 200407908 B	13-10-2005
US 2014193887 A1	10-07-2014	EP 2732016 A1	21-05-2014
		JP 2014523469 A	11-09-2014
		US 2014193887 A1	10-07-2014
		WO 2013007367 A1	17-01-2013

EPO FORM P0459

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