



Europäisches Patentamt
European Patent Office
Office européen des brevets



Publication number: **0 315 024 A3**

12

EUROPEAN PATENT APPLICATION

21 Application number: **88117719.0**

51 Int. Cl.⁵: **C11D 17/00, C11D 3/12,
C11D 3/37**

22 Date of filing: **25.10.88**

30 Priority: **05.11.87 US 117184**

43 Date of publication of application:
10.05.89 Bulletin 89/19

84 Designated Contracting States:
AT BE CH DE ES FR GB GR IT LI LU NL SE

88 Date of deferred publication of the search report:
20.03.91 Bulletin 91/12

71 Applicant: **Colgate-Palmolive Company**
300 Park Avenue
New York, N.Y. 10022-7499(US)

72 Inventor: **Fahim, U. Ahmed**
46 Wetherhill Way
Dayton, New Jersey(US)
Inventor: **Buck, Charles E.**
3 Lockward Road
Caldwell, New Jersey(US)

74 Representative: **UEXKÜLL & STOLBERG**
Patentanwälte
Beselerstrasse 4
W-2000 Hamburg 52(DE)

54 **Thixotropic aqueous liquid automatic dishwashing detergent composition.**

57 Thixotropic aqueous liquid automatic dishwashing detergent composition with improved anti-filming and anti-spotting properties and method of using the detergent composition. The detergent composition comprises alumina or titanium dioxide anti-filming agent, polyacrylate polymer anti-spotting agent, inorganic builder salts, chlorine bleach, bleach-stable detergent and a thixotropic thickener. The compositions provide reduced filming and spotting on dishware, glassware, china and the like, particularly in hard water, and remain stable against phase separation.

EP 0 315 024 A3



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
A	GB-A-2 163 448 (COLGATE-PALMOLIVE) * examples 1, 6 * - - -	1	C 11 D 3/12 C 11 D 3/37 C 11 D 17/00
A	GB-A-2 168 717 (COLGATE-PALMOLIVE) * claim 1 ** example 1 * - - -	1,3,21	
A	EP-A-0 206 534 (PROCTER & GAMBLE) * claims 1-13, 19-23 * - - -	1	
A,P	EP-A-0 252 708 (UNILEVER) * claims 1-3, 10 ** example 10 * - - - - -	1	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			C 11 D
Place of search	Date of completion of search	Examiner	
The Hague	24 January 91	PFANNENSTEIN H.F.	
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention		E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	