

EUROPEAN PATENT APPLICATION

Application number: **90201047.9**

Int. Cl.⁵: **C11D 1/83**

Date of filing: **25.04.90**

Priority: **26.04.89 US 343227**
26.04.89 US 343231

Date of publication of application:
28.11.90 Bulletin 90/48

Designated Contracting States:
BE DE ES FR GB IT NL SE

Date of deferred publication of the search report:
27.12.90 Bulletin 90/52

Applicant: **SHELL INTERNATIONALE
RESEARCH MAATSCHAPPIJ B.V.**
Carel van Bylandtlaan 30
NL-2596 HR Den Haag(NL)

Inventor: **Kravetz, Louis**
5455 Timber Creek Place No. 209
Houston, Texas 77084(US)
Inventor: **Raney, Kirk Herbert**
2603 Barrington Court
Sugar Land, Texas 77478(US)

Representative: **Aalbers, Onno et al**
P.O. Box 302
NL-2501 CH The Hague(NL)

Surface active compositions.

A surface active composition which is either a liquid or dry powder, which comprises: a) from 15 per cent by weight to 99 per cent by weight of an alcohol ethoxylate having the formula $R-O-(CH_2CH_2O)_n-H$, wherein R is an alkyl group having from 8 to 18 carbon atoms or an alkylaryl group having an alkyl moiety in the range of from 8 to 12 carbon atoms, and n represents the average number of oxyethylene groups per molecule and is a number in the range of from 1 to 12, b) from 1 per cent by weight to 80 per cent by weight of a salt of an alcohol ethoxysulfate having the formula $R'-O-(CH_2CH_2O)_x-SO_3M$, wherein R' is an alkyl group having from 8 to 18 carbon atoms or an alkylaryl group having an alkyl moiety in the range of from 8 to 12 carbon atoms, M is a cation selected from the group consisting of an alkali metal ion, an ammonium ion and mixtures thereof, and x represents the average number of oxyethylene groups per molecule and is a number in the range of from 1 to 12, and c) from 0.01 per cent by weight to 15 per cent by weight water, wherein components (a) and (b) comprise at least 85 per cent by weight of components (a), (b) and (c) and if desired an adsorbent powder detergent ingredient.

EP 0 399 581 A3



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number

EP 90 20 1047

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)
X A	FR-A-2 135 214 (COLGATE PALMOLIVE) * claims 1,4-6 * ---	1,3 4-6,9, 10	C 11 D 1/83
X	FR-A-2 189 505 (COLGATE PALMOLIVE) * claims 1,2,5-7 * ---	1,3	
X	FR-A-2 193 872 (COLGATE PALMOLIVE) * claims 1,2,5,6 * ---	1,3	
X	PATENT ABSTRACTS OF JAPAN vol. 1, no. 61 (C-77)(733), 15 June 1977; & JP-A-5222007 (THE LION FAT AND OIL K.K.) 19.02.1977 ---	1,3	
A	(HENKEL) * claims * ---	1	
A	PATENT ABSTRACTS OF JAPAN vol. 2, no. 93 (C-78)(1648), 29 July 1978; & JP-A-5358508 (MITSUBISHI KASEI KOGYO K.K.) 26.05.1978 * abstract * ---	1	TECHNICAL FIELDS SEARCHED (Int. Cl.5)
A	EP-A-0 265 203 (UNILEVER PLC et al.) * abstract * -----	1	C 11 D
The present search report has been drawn up for all claims			
Place of search BERLIN		Date of completion of the search 07-09-1990	Examiner PELLI-WABLAT B
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			