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(54) **Use of polymers in laundry cleaning**

(57) A detergency enhancing polymer is used in a laundry cleaning operation to improve removal of oily and/or greasy soil from cotton fabrics. This polymer is a homopolymer or copolymer containing one or more monomer units independently selected from those of formula (I)

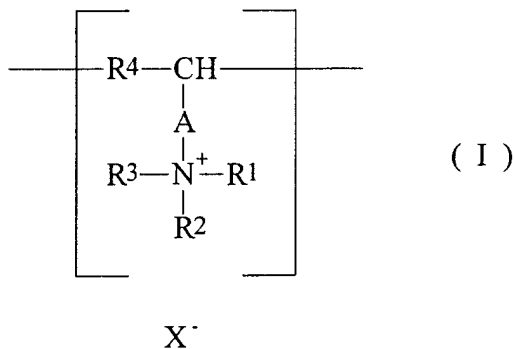
$-R^5-(CO)-NH-R^6-$, $-R^5-NH-(CO)-R^6-$, wherein R^5 and R^6 are independently absent, or represent C_{1-3} alkyl groups;

R^1 , R^2 and R^3 are independently selected from hydrogen, C_{1-3} alkyl, C_{1-3} alkenyl, hydroxy- C_{1-3} alkyl and C_{5-8} cycloalkyl groups; and

R^4 is selected from groups as defined for A above;

wherein R^3 may also represent a bridge, group with the group R^4 , said bridging group being selected from groups as defined for A above; and

X⁻ is a monovalent anion or an n'th part of an n-valent anion.



wherein -A- is selected from groups of formula $-R^5-$, $-R^5-(CO)-R^6-$, $-R^5-(CO)-O-R^6-$, $-R^5-O-(CO)-R^6-$,



European Patent Office

EUROPEAN SEARCH REPORT

Application Number
EP 01 30 3102

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.7)
E	WO 01 79408 A (UNILEVER) 25 October 2001 (2001-10-25) * claims * * examples 1-6 * * page 1, line 26 - line 31 * * page 4, line 20 - line 24 * * page 7, line 6 - line 14 * * page 7, line 29 - page 10, line 18 * * page 11, line 19 - page 12, line 28 * ---	1-15	C11D3/37 C11D1/02 C11D1/83
E	WO 01 79407 A (UNILEVER) 25 October 2001 (2001-10-25) * claims * * examples 1-6 * * page 1, line 23 - line 27 * * page 4, line 21 - line 25 * * page 8, line 1 - line 17 * * page 8, line 27 - page 11, line 21 * * page 13, line 1 - page 16, line 30 * ---	1-15	
X	GB 2 164 657 A (COLGATE PALMOLIVE CO) 26 March 1986 (1986-03-26) * claims 1,10,31,43,44 * * example 5 *	1-4,7, 16-18	TECHNICAL FIELDS SEARCHED (Int.Cl.7) C11D
A	* page 1, line 63 - page 2, line 11 * * page 2, line 57 - line 61 * * page 4, line 13 - line 25 * * page 8, line 12 - line 15 * * page 12, line 26 - page 13, line 5 * -----	5,6,8-15	
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 2 May 2002	Examiner Neys, P
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	

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

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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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