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Heavy duty liquid laundry detergents containing anionic and nonionic surfactant, builder and proteolytic enzyme.

Heavy duty liquid laundry detergent compositions containing synthetic anionic and ethoxylated nonionic surfactant, detergency builder, specific proteolytic enzyme, an enzyme stabilization system, and water are disclosed. The compositions have a pH in a 10% by weight solution in water at 20°C of between about 7.0 and 9.0, a Critical Micelle Concentration of less than or equal to about 200 ppm, and an air/water Interfacial Tension above the Critical Micelle Concentration of less than or equal to about 32 dynes/cm at 35°C in distilled water. The compositions are preferably clear, homogeneous, stable and provide good cleaning performance, particularly through-the-wash on enzyme-sensitive stains.

EP 0 342 177 A3



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EUROPEAN SEARCH REPORT

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EP 89 87 0064

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.4)
A,D	EP-A-0 199 104 (THE PROCTER & GAMBLE COMPANY) * claims 1-10 * ---	1,4	C 11 D 3/386 C 11 D 1/83 C 11 D 3/20 C 11 D 3/37 C 11 D 3/30
A,D	US-A-4 318 818 (J.C. LETTON et al.) * claims 1-6 * ---	1	
A,D	US-A-4 670 179 (J.T. INAMORATO et al.) * claims 1-6 * ---	1	
A	GB-A-2 194 956 (THE PROCTER & GAMBLE COMPANY) * claim 1 * -----	3	
			TECHNICAL FIELDS SEARCHED (Int. Cl.4)
			C 11 D 1/83 C 11 D 3/20 C 11 D 3/386
The present search report has been drawn up for all claims			
Place of search BERLIN		Date of completion of the search 13-07-1990	Examiner KNAACK
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			