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Enzyme-containing detergent compositions.

⑤ A granular detergent composition or component ← therefor, which comprises:

(a) from 6% to 35%, often over 17%, by weight of non-soap detergent-active material consisting at least partially of anionic and/or nonionic detergent-active material;

(b) at least 45% by weight of builder

(b1) the builder including at least 28%, e.g. up to 45%, by weight (anhydrous basis) of crystalline or amorphous sodium aluminosilicate and/or citrate, carbonate, or layered silicate builder,

(c) a lipolytic enzyme the weight ratio of (b1) to (a) being from 0.9:1 to 2.6:1, preferably from 1.2:1 to 1.8:1; and other detergent ingredients to 100% by

weight.



EUROPEAN SEARCH REPORT

EP 89 31 1465

]	DOCUMENTS CONS	IDERED TO BE RELEVA	NT		
Category	Citation of document with of relevant p	indication, where appropriate, assages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)	
х	EP-A-271153 (UNILEVER) * page 5, lines 5 - 14 * example 1 *		1, 4-8	C11D3/386 C11D3/12 C11D3/20 C11D3/10	
A	EP-A-206390 (UNILEVER) * claims 1-7 * * example 13 *		1	G11557 10	
A,D	1986 Columbus, Ohio, USA	1. 105, no. 14, October 044& JP-A-6169897 (KAO),	2		
P,X	CHEMICAL ABSTRACTS, vo 1989 Columbus, Ohio, USA page 118; ref. no. 233 & JP-A-63305198 (KURA * abstract *		1	TECHNICAL FIELDS SEARCHED (Int. Cl.5)	
P,A	EP-A-340013 (UNILEVER) * the whole document *		2	C11D	
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		Date of completion of the search 22 AUGUST 1990	Examiner PFANNENSTEIN H.		
X : parti Y : parti docu A : tech O : non-	CATEGORY OF CITED DOCUME icularly relevant if taken alone icularly relevant if combined with an iment of the same category nological background written disclosure mediate document	E : earlier patent after the filing other D : document cite L : document cite	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		

1