

(19)



Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) Publication number:

0 264 869
A3

(12)

EUROPEAN PATENT APPLICATION

(21) Application number: **87115223.7**(51) Int. Cl.4: **D04H 1/64**(22) Date of filing: **17.10.87**(30) Priority: **20.10.86 US 921165**(43) Date of publication of application:
27.04.88 Bulletin 88/17(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:
14.02.90 Bulletin 90/07(71) Applicant: **The B.F. Goodrich Company**
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(54) **Nonwoven fabric with an acrylate interpolymer binder and a process of making the nonwoven fabric.**

(57) Fibers treated with a novel latex containing a polymeric material of the present invention have an exceptional balance of physical properties. The novel latex is prepared by polymerizing an unsaturated dicarboxylic acid contained 4 to 10 carbon atoms with a copolymerizable monomer(s) and, optionally, a crosslinking monomer in the presence of an effective amount of a surfactant and initiator. In an preferred embodiment of the process, all of the unsaturated dicarboxylic acid is initially placed in the reactor, and a premix containing the copolymerizable monomer(s) and the crosslinking monomer is metered into the reactor. The unsaturated dicarboxylic acid is used an amount from about 1 to about 20 weight parts, the amount of the copolymerizable monomer is from about 70 to 98 weight parts, and the amount of the crosslinking monomer, which is optional is from about 0.52 to about 10 weight parts. The novel polymers have a T_g from about -20° C to about -60° C, a percent hysteresis loss of less than about 20% and exhibit a tensile strength of at least 300 psi and an elongation of at least 350%. When the novel latex is applied to the fibers, a nonwoven fabric having unique balance of properties is created.

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EP 87 11 5223

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	WO-A-8 601 519 (COMMONWEALTH SCIENTIFIC AND IND. RESEARCH ORGANIZATION) * Claims 1,6,11-22; page 2, line 3 - page 11, line 13; examples 1,3 * ---	1-6,8-15,17,18	D 04 H 1/64
A	EP-A-0 021 693 (ROHM & HAAS) * Claims 1-3; page 6, line 1 - page 9, line 28; page 12, line 13 - page 19, line 11; examples 5,10 * ---	1-7,9-16,18	
A	EP-A-0 147 759 (THE B.F. GOODRICH) * Claims 1,6,11,12; page 3, line 10 - page 6, line 16; page 13, line 27 - page 17, line 1 * ---	1-20	
A	GB-A- 962 458 (RHOM & HAAS) * Claims 1-3,7-10,14; page 1, line 11 - page 4, line 19 * -----	1-20	
			TECHNICAL FIELDS SEARCHED (Int. Cl.4)
			D 04 H
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 13-11-1989	Examiner BLASBAND I.
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			