

19



Europäisches Patentamt
European Patent Office
Office européen des brevets



11 Publication number:

0 361 763 A3

12

EUROPEAN PATENT APPLICATION

21 Application number: **89309505.9**

51 Int. Cl.⁵: **D21H 17/69, D21H 17/28**

22 Date of filing: **19.09.89**

30 Priority: **26.09.88 GB 8822577**

43 Date of publication of application:
04.04.90 Bulletin 90/14

64 Designated Contracting States:
AT DE ES FR IT SE

68 Date of deferred publication of the search report:
11.12.91 Bulletin 91/50

71 Applicant: **BLUE CIRCLE INDUSTRIES PLC**
Portland House Stag Place
London SW1E 5BJ(GB)

72 Inventor: **Beckett, Christine Anne**
25 The Braes Higham
Rochester Kent ME3 7NA(GB)

74 Representative: **Fisher, Adrian John et al**
CARPMAELS & RANSFORD 43 Bloomsbury
Square
London WC1A 2RA(GB)

54 **Papermaking filler compositions.**

57 A composition for flocculating paper- or board-making filler comprises particles of starch, in aqueous suspension, and a flocculating agent, eg. a polyacrylamide. Preflocculated filler for addition to a paper- or boardmaking stock may be prepared by adding such a composition to an aqueous slurry of filler particles, eg. calcium carbonate. The use of particulate starch that is insoluble in water at temperatures normally encountered in the wet-end of a paper- or boardmaking process, in particular temperatures below 35 °C, obviates the need for a preliminary solubilisation step. However, the starch is soluble at temperatures encountered in the drying stage of the paper- or boardmaking process, where a starch solution is formed which is distributed through the paper matrix and imparts thereto additional strength.

EP 0 361 763 A3



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	TAPPI JOURNAL. vol. 67, no. 2, February 1984, ATLANTA US pages 104 - 108; A.M.SPRINGER ET AL.: 'THE INFLUENCE OF STARCH ON DRAINAGE AND RETENTION IN PAPERBOARD MILL SYSTEMS.' * the whole document ** - - - -	1,6-8	D 21 H 17/69 D 21 H 17/28
Y	ABSTRACT BULLETIN OF THE INSTITUTE OF PAPER CHEMISTRY. vol. 57, no. 11, May 1987, APPLETON US page 1552; O.JOKINEN ET AL.: 'INTERDEPENDENCE OF RETENTION AND FORMATION IN THE MANUFACTURE OF SUPERCALENDERED PAPER' ABSTRACT N.14120 * abstract ** - - - -	1,8	
Y	US-A-3 640 842 (C.H.HULLINGER ET AL.) * the whole document ** - - - -	1,8	
A	US-A-4 210 490 (J.H.TAYLOR) * the whole document ** - - - -		
D,A	GB-A-1 552 243 (M.C.RIDDEL) - - - - -		
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			D 21 H
The present search report has been drawn up for all claims			
Place of search		Date of completion of search	Examiner
The Hague		04 October 91	SONGY O.M-L.A.
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	