## **Europäisches Patentamt European Patent Office**

Office européen des brevets



EP 0 760 406 A3 (11)

(12)

## **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3: 17.09.1997 Bulletin 1997/38 (51) Int. Cl.6: **D21H 21/02** 

(43) Date of publication A2: 05.03.1997 Bulletin 1997/10

(21) Application number: 96304036.5

(22) Date of filing: 04.06.1996

(84) Designated Contracting States: CH DE FI FR GB LI SE

(30) Priority: 24.08.1995 US 518954

(71) Applicant: NALCO CANADA, INC. **Burlington, Ontario L7R 3Y9 (CA)** 

(72) Inventors:

· Pruszynski, Przemyslaw Burlington, Ontario, L7M 3E3 (CA)  Armstrong, John R. Burlington, Ontario, L8W 2N6 (CA)

 Chan, Alexander Scarborough, Ontario, M1V 4L2 (CA)

(74) Representative: Harrison, David Christopher et al **MEWBURN ELLIS** York House 23 Kingsway London WC2B 6HP (GB)

## Combination of poly (dadmac/acrylamide) and bentonite for deposition control in (54)papermaking processes

A method for minimizing pitch, ink, and stickies particle deposits in the papermaking process by causing the retention of such particles onto fiber, comprising the steps of adding an effective pitch, ink, and stickies controlling amount of a water soluble diallyldimethyl ammonium chloride-acrylamide copolymer to a suspension of fiber in contact with the paper machine and associated parts and adding an effective pitch, ink, and stickies controlling amount of bentonite to the suspension, thereby increasing retention of pitch, ink, and stickies onto the fiber and minimizing the deposition of pitch, ink, and stickies particles on the paper machine and associated parts.



## EUROPEAN SEARCH REPORT

Application Number EP 96 30 4036

Category	Citation of document with of relevant p	indication, where appropriate, assages	Relevant to claim	CLASSIFICATION OF TH APPLICATION (Int.Cl.6)
Υ	CA 2 102 742 A (NAI 1994 the entire document	LCO CHEMICAL CO) 11 May	1,2,5-8, 10	D21H21/02
X	EP 0 335 575 A (ALLIED COLLOIDS LTD) 4 October 1989 * page 3, line 43 - line 48; example 3 * * page 2, line 35 - line 40 *		1,2,7-9	
Υ	EP 0 584 513 A (NAI 1994 comparative example * page 8, line 30 - example 2 *	CO CHEMICAL CO) 2 March 2 2 - page 9, line 38;	1-3,5-8, 10	
Υ	WO 93 13265 A (VIN) 1993 * page 25 *	NGS IND INC) 8 July	1,6,9	
Y	EP 0 586 755 A (ECC 16 March 1994 * example 1 *	: INT LTD ;CDM AB (SE))	1,3,6,9, 10	TECHNICAL FIELDS SEARCHED (Int.Cl.6)
A		RICHARD (FR); DELORD)	1,3,6,10	
	The present search report has b	een drawn up for all claims  Date of completion of the search		Exambec
	MUNICH	18 July 1997	Naes	slund, P
X : part Y : part docu	CATEGORY OF CITED DOCUME icularly relevant if taken alone icularly relevant if combined with an iment of the same category	NTS T: theory or principle E: earlier patent docu- after the filing dat other D: document cited in L: document cited for	underlying the iment, but publishe the application of the reasons	invention shed on, or
Y: particularly relevant if combined with and document of the same category A: technological background O: non-written disclosure P: intermediate document		other D: document cited in L: document cited for	D: document cited in the application L: document cited for other reasons  &: member of the same patent family, corresponding	