

(19)



Europäisches Patentamt

European Patent Office

Office européen des brevets



(11)

**EP 0 728 866 A3**

(12)

**EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:  
**21.01.1998 Bulletin 1998/04**

(51) Int. Cl.<sup>6</sup>: **D21F 3/08**, D21G 1/02,  
D21F 5/02

(43) Date of publication A2:  
**28.08.1996 Bulletin 1996/35**

(21) Application number: **96100981.8**

(22) Date of filing: **24.01.1996**

(84) Designated Contracting States:  
**AT DE FR GB IT SE**

(30) Priority: **24.02.1995 FI 950849**

(71) Applicant: **VALMET CORPORATION**  
**00620 Helsinki (FI)**

(72) Inventors:  
• **Mäntylä, Tapio**  
**FIN-33710 Tampere (FI)**  
• **Sorsa, Petri**  
**FIN-33310 Tampere (FI)**

• **Telama, Ari**  
**FIN-40520 Jyväskylä (FI)**  
• **Lehtonen, Pentti**  
**FIN-40250 Jyväskylä (FI)**

(74) Representative:  
**Tiedtke, Harro, Dipl.-Ing.**  
**Patentanwaltsbüro**  
**Tiedtke-Bühling-Kinne & Partner**  
**Bavariaring 4**  
**80336 München (DE)**

(54) **Method of controlling the surface properties of surfaces in a paper machine and use of the method in the surface treatment of surfaces in a paper machine**

(57) The present invention relates to a method of controlling the surface properties of surfaces in a paper machine by virtue of treating said surfaces with a surface treatment compound to achieve desired surface properties. According to the invention, the surfaces are treated with a liquid surface treatment compound whose characteristics are controlled by modifying the backbone polymer chain of the surface treatment compound advantageously by halogenated macrooligomers, diols, triols, thiols and/or other polyols. The invention also concerns the use of the method in the surface treatment of surfaces in a paper machine.

**EP 0 728 866 A3**



European Patent  
Office

# EUROPEAN SEARCH REPORT

Application Number  
EP 96 10 0981

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.6)
X	PATENT ABSTRACTS OF JAPAN vol. 17, no. 162 (C-1042), 30 March 1993 & JP 04 325512 A (IDEMITSU PETROCHEM CO. LTD.), 13 November 1992, * abstract *	1,10	D21F3/08 D21G1/02 D21F5/02
X	--- PATENT ABSTRACTS OF JAPAN vol. 14, no. 157 (M-0955), 27 March 1990 & JP 02 020343 A (IDEMITSU PETROCHEM CO. LTD), 23 January 1990, * abstract *	1,10	
A	--- EP 0 613 729 A (VALMET PAPER MACHINERY INC)		
A	--- EP 0 481 321 A (YAMAUCHI CORP.) -----		
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			D21F D21G
The present search report has been drawn up for all claims			
Place of search <b>THE HAGUE</b>		Date of completion of the search <b>21 November 1997</b>	Examiner <b>DIAZ-MAROTO, V</b>
<p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>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</p> <p>&amp; : member of the same patent family, corresponding document</p>			

EPO FORM 1503 03.82 (P04C01)