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## (54) Papermaking process using multi-polymer retention and drainage aid

(57) The claimed invention comprises a papermaking process comprising forming an aqueous cellulosic papermaking slurry, adding to the slurry a mineral filler, adding to the slurry after the addition of the mineral filler a cationic polymeric coagulant, then adding to the slurry an effective flocculating amount of a high molecular

weight anionic polymer selected from the group consisting of acrylamide/sodium acrylate copolymers and copolymers of acrylamide and acrylamido methyl propyl sulfonate (AMPS), adding a low molecular weight anionic polymer selected from the group consisting of polyacrylic acid and methacrylic acid, draining the slurry to form a sheet, and drying to form a paper sheet.



## **EUROPEAN SEARCH REPORT**

Application Number EP 97 30 0969

	DOCUMENTS CONSIDE	·		
Category	Citation of document with ind of relevant passa		Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.CI.6)
Α	US 5 266 164 A (NOVA 30 November 1993 * column 5, line 1 -		1-6	D21H23/76 D21H21/10 //D21H17/68,
А	US 5 185 062 A (BEGA 9 February 1993 * column 4, line 62 claims *		1-5	D21H17/33
				TECHNICAL FIELDS SEARCHED (Int.Cl.6) D21H
	The present search report has be			
	Place of search THE HAGUE	Date of completion of the search	Don	Examiner
X : part Y : part docu A : tech O : non	ATEGORY OF CITED DOCUMENTS  cularly relevant if taken alone cularly relevant if combined with anothe iment of the same category nological background written disclosure mediate document	E : earlier patent after the filing r D : document cite L : document cite	ciple underlying the i document, but publi- date ed in the application ed for other reasons	shed on, or

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## ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 97 30 0969

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