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(54) Packaging materials

(57) A method of increasing the coefficient of static friction of a cellulosic sheet which method comprises the steps of preparing a sprayable aqueous coating composition comprising an aqueous suspension of a finely divided particulate inorganic material comprising material selected from the group consisting of kaolin clay, calcined kaolin, ground natural calcium carbonate, chemically precipitated calcium carbonate and zeolites, and,

preferably from 4% to 60% by weight, based on the dry weight of the particulate inorganic material, of an adhesive, and spraying the coating composition on to the surface of a cellulosic sheet, in a quantity sufficient to give, after drying of the coating, a suitable coat weight per unit surface area, eg in the range of from 0.5g.m⁻² to 3.0g.m⁻². The static coefficient of friction of the coated sheet may be at least 0.5.



EUROPEAN SEARCH REPORT

Application Number EP 98 31 0335

Category	Citation of document with in of relevant passa		Relevan to claim		
Y	WO 94 19199 A (MINNE 1 September 1994 (19 * claims 1,2,15; exa	994-09-01)	1	D21H23/50 D21H21/14 D21H19/36 D21H27/10	
X	EP 0 760 342 A (WEST 5 March 1997 (1997-0		19	D21H2//10	
Υ	* page 3, line 31-40		1		
X	EP 0 664 358 A (WEST 26 July 1995 (1995-0		19		
Υ	* page 3, line 41-56		1		
Y	US 4 948 664 A (BROO 14 August 1990 (1990 * claims 1,3,9,13-16	0-08-14)	1		
Y	WO 94 11116 A (SUNDH ROBERT (NZ); KANGAS 26 May 1994 (1994-0! * page 1, paragraph * page 3, paragraph * page 9, paragraph	1	TECHNICAL FIELDS SEARCHED (Int.Ci.6)		
Y,D A	US 5 569 318 A (JAR, 29 October 1996 (199 * claim 1 *		7,8	DZIN	
	The present search report has be	peen drawn up for all claims	_		
	The present search report has t	Date of completion of the search		Examiner	
	MUNICH	24 February 200	0 K	Carlsson, B	
X:par Y:par doo A:tec	CATEGORY OF CITED DOCUMENTS ticularly relevant if taken alone ticularly relevant if combined with anotument of the same category hnological background n-written disclosure symediate document	T: theory or princ E: earlier patent after the filing D: document cite L: document cite	iple underlying document, but p date d in the applica d for other reas	the invention published on, or attion	

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

EP 98 31 0335

This annex lists the patent family members relating to the patent documents cited in the above–mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

24-02-2000

cited in search report		date		member(s)		Publicatio date	
WO 94191	99 A	01-09-1994	CA	2094004	Α	05-11-	
			CA	2154167	Α	01-09~	
			DE	69312564	D	04-09-	
			DE	69312564		05-02-	
			EP	0569285		10-11-	
			JP	6048022		22-02-	
EP 07603	42 A	05-03-1997	US	5660898	A	26-08-	
			AU	692110	В	28-05-	
			AU	6202096	Α	06-03-	
			BR	9603555		19-05-	
			CA	2182921		01-03-	
			CZ	9602507		12-03-	
			HU	9602292		28-05-	
			JP	9117380		06-05-	
			NO.	963276		03-03-	
			PL	315852		03-03-	
			TR	970221		21-03-	
			ÜS	5855973		05-01-	
EP 06643	58 A	26-07-1995	US	5425972	Α	20-06-	
			US	5418008		23-05-	
			AU	666632		15-02-	
			AU	1136395		17-08-	
			CA	2140597		25-07-	
			CZ	9500141		13-08-	
			FΙ	950308		25-07-	
			HŪ	73640		28-08-	
			JP	7267242		17-10-	
			NO	950205		25-07-	
			PL	306938		07-08-	
US 49486	64 A	14-08-1990	BR	8005984	Α	31-03-	
			CA	1119485		09-03-	
			EΡ	0026075	Α	01-04-	
			ES	495561		01-11-	
			FΙ	802938		20-03-	
			GB	2058734		15-04-	
			ĴΡ	56101997		14-08-	
			NO	802770		20-03-	
WO 94111	16 A	26-05-1994	FI	925045	 А	07-05-	
			FI	934890		07-05-	
			AU	5421794		08-06-	
			BR	9307399		31-08-	
			CA	2148505		26-05-	

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

EP 98 31 0335

This annex lists the patent family members relating to the patent documents cited in the above–mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

24-02-2000

cite	Patent document ed in search repo	ort	Publication date	P: r 	atent family nember(s)		Publication date
WO	9411116	Α		DE DE EP	69323438 69323438 0682571	T	18-03-1999 24-06-1999 22-11-1994
US	5569318	Α	29-10-1996	NONE			
			Official Journal of the Euro				