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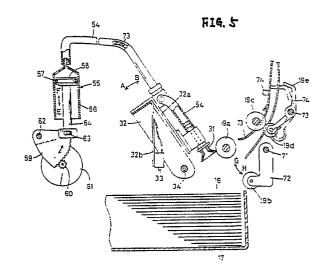
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- Sheet feeding mechanism having dust preventing means and method for cleaning the sheet feeding mechanism.
- (57) A sheet feeding mechanism having dust preventing means. The sheet feeding mechanism includes a suction cup (31) contactable with a sheet, evacuating means (55) for generating negative pressure within the suction cups and tube means (54) connected between the evacuating means and the suction cups. The dust preventing means includes a filter member (73) disposed within the tube means. The evacuating means includes a cylinder (56) and a piston (58). The cylinder extends in vertical direction or in horizontal direction. In the latter case, one side end of the cylinder is connected to the tube means and another side end is closed for preventing dusts from being entered thereinto, and the cylinder wall is formed with a small bore at lower portion thereof and adjacent the other side. For cleaning the sheet feeding mechanism, positive air stream is generated within the mechanism during idling state thereof.



EP 0 381 382 A3



## EUROPEAN SEARCH REPORT

EP 90 30 0808

DOCUMENTS CONSIDERED TO BE RELEVANT  Citation of document with indication, where appropriate, Relevant					CLASSIFICATION OF THE
jory	Citation of document with inc of relevant			iaim	APPLICATION (Int. CI.5)
A	US-A-1 861 605 (MAASS) * the whole document *	_	1-5,9	9,11	.В 65 Н 3/08
	US-A-3 220 723 (CONTROL I * column 2, lines 3 - 30; figures		1-5		
	GB-A-1 448 388 (GLORY KOO * page 3, lines 1 - 26; figure 3 * 	GYO) 	1,2,4	1,5	
					TECHNICAL FIELDS SEARCHED (Int. C1.5)  B 65 H
	The present search report has been	drawn up for all claims			
	Place of search Date of completion of The Hague 27 November			th Examiner  LONCKE J.W.	
Υ:	CATEGORY OF CITED DOCUMENTS  X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same catagory		E: earlier patent document, but published on, or after the filing date D: document cited in the application L: document cited for other reasons		
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