11) Publication number:

0 308 853 A3

(12)

EUROPEAN PATENT APPLICATION

(21) Application number: 88115330.8

(5) Int. Cl.⁵: B65H 5/30, B65H 5/12

2 Date of filing: 19.09.88

3 Priority: 23.09.87 US 100273

Date of publication of application:29.03.89 Bulletin 89/13

Designated Contracting States:
 CH DE FR GB IT LI

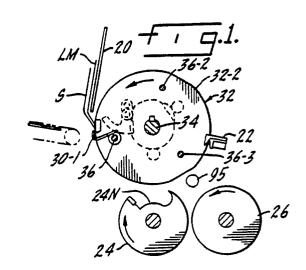
Date of deferred publication of the search report: 16.05.90 Bulletin 90/20 Applicant: McCain Manufacturing Corporation 6200 West 60th Street Chicago Illinois 60638(US)

Inventor: McCain, William B. 710 Country Line Road Hinsdale, IL 60521(US) Inventor: Higgins, George D. 7731 Cashew Drive Orland Park, IL 60462(US)

Representative: Patentanwälte Grünecker, Kinkeldey, Stockmair & Partner Maximilianstrasse 58 D-8000 München 22(DE)

Signature gathering machines.

© Signature gathering machine in which signatures (5) are extracted by an extracting cylinder (32) successively from a hopper (20), released at a register gauge (22), opened by grippers (75) on opposed opening cylinders (24, 26) and then those grippers are opened to drop the signature (5) onto a saddle conveyor (28); wipers (60) rotate with the extracting cylinder (32) and are actuated in timed relation to arrival of the signature (5) at the register gauge (22) so as to force the free edges of the signature (5) into the space between the opening cylinders (24, 26).



EP 0 308 853 A3



EUROPEAN SEARCH REPORT

EP 88 11 5330

Cotagon Citation of document with indication, where appropriate,			Relevant	CLASSIFICATION OF THE	
Category	of relevant pass		to claim	APPLICATION (Int. Cl.4)	
A,D	US-A-2413358 (KLEINEBERG)	1	B65H5/30	
	* column 10, lines 8 - 5			B65H5/12	
A	US-A-4180255 (HIMMEL) * column 3, lines 51 - 6	D. figure 1 *	1		
	~ column 3, lines 51 - 6	5; 11gure 1 "			
A	DE-A-2820876 (GRAPHA-HOLI	DING AG.)	1		
	* pages 7 - 9; figures 1	-3 *			
		-	1		
A	DE-A-2334071 (HARRIS-INT) * page 9, lines 17 - 26;		1		
				TECHNICAL FIELDS	
				SEARCHED (Int. Cl.4)	
				B65H	
				:	
				:	
			-		
	The present search report has be				
	Place of search	Date of completion of the search		Examiner	
	THE HAGUE	01 MARCH 1990	DIA	Z-MAROTO V.	
	CATEGORY OF CITED DOCUMEN	T: theory or princip E: earlier patent do	ole underlying th	e invention	
X : pa	X: particularly relevant if taken alone after the filin		late		
Y: particularly relevant if combined with another D document of the same category L		L: document cited	D : document cited in the application L : document cited for other reasons		
A : technological background O : non-written disclosure		& : member of the	same patent fam	ily, corresponding	
	ermediate document	document	•		

1