

(19)



Europäisches Patentamt  
European Patent Office  
Office européen des brevets

(11) Publication number:

**0 280 147  
A3**

(12)

# EUROPEAN PATENT APPLICATION

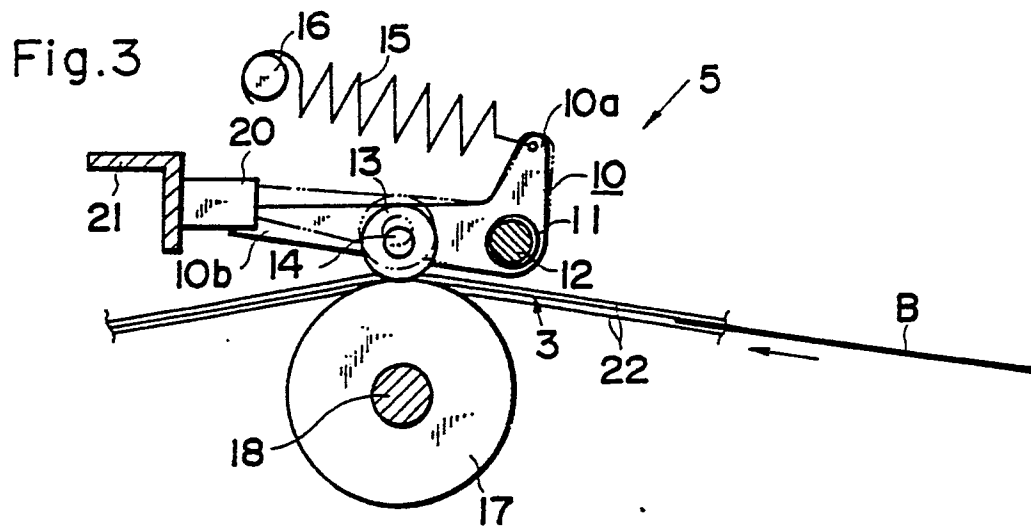
(21) Application number: **88102194.3**(51) Int. Cl.4: **G07D 1/00 , B65H 7/12**(22) Date of filing: **15.02.88**(30) Priority: **25.02.87 JP 40383/87**(43) Date of publication of application:  
**31.08.88 Bulletin 88/35**(84) Designated Contracting States:  
**AT BE CH DE ES FR GB GR IT LI LU NL SE**(88) Date of deferred publication of the search report:  
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**Eduard-Schmid-Strasse 2  
D-8000 München 90(DE)**(54) **Paper sheet handling apparatus.**

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(57) Two thickness detectors (5) each for outputting an electric signal representing the thickness of a paper sheet(B) passing thereby are arranged side by side in the width direction of a paper sheet conveyance path (3). Parameters such as paper sheet thickness, length, the existence of skew and, if skew exists, the skew angle ( $\theta$ ), are calculated based on the output signals from the thickness detectors. This facilitates detection of two or more overlapping bank notes among a wide variety of bank notes having different thicknesses or in case of a bank note having a significantly non-uniform thickness. The correct thickness of a paper sheet is also obtained at all times by using the skew angle and the reference

length (W) of the paper sheet. This not only facilitates detection of two overlapping bank notes among a wide variety of bank notes having different thicknesses or in case of a bank note having a significantly non-uniform thickness, but also enables detection to be made very accurately. The number of paper sheets being conveyed past the thickness detectors at one time is determined based on the output signals of the thickness sensors. If the number of sheets has been reliably determined, this number of sheets is released even when sheets are being conveyed in an overlapping state and not just singly.





EP 88 10 2194

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.4)
X	US-A-3 930 582 (GARTNER) * Column 2, lines 1-9,61-68; column 3, lines 1-36 *	1	G 07 D 1/00 B 65 H 7/12
Y		2	
A		7-9,11, 15,17	
Y	--- EP-A-0 025 976 (TOKYO) * Claim 1 *	2	
A		4,11-13 ,17-19	
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			TECHNICAL FIELDS SEARCHED (Int. Cl.4)
			G 07 D G 01 B
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 31-10-1989	Examiner TACCOEN J-F.P.L.
<b>CATEGORY OF CITED DOCUMENTS</b> 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 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 ..... & : member of the same patent family, corresponding document			