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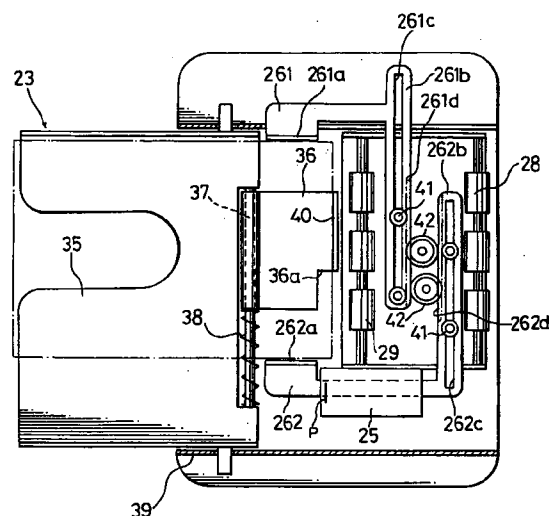
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(54) Sorter incorporating a stapler

(57) A sorting apparatus is provided for sorting and stapling sheets discharged from an image forming apparatus. A plurality of vertically driven sheet bins (23, 73) are provided along with a stapler (25) for stapling the sheets while stored in the bins (23, 73). A pair of lateral guides (261, 262) move stacks of sheets in the sheet width direction within the bins. The lateral guides are adapted to abut on either side of the sheets and to position the sheets from an original position into a stapling position in front of the stapler (25).

FIG. 3



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EUROPEAN SEARCH REPORT

Application Number

DOCUMENTS CONSIDERED TO BE RELEVANT			EP 94116170.5
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
Y	<u>GB 2137596 A</u> (CANON) 10 October 1984 (10.10.84), fig. 1,2.	1	B 65 H 31/24 B 65 H 31/20
A	---	2-12	
Y	Patent Abstracts of Japan, Vol. 8, No. 274 (M-345), 1984; & JP 59-143853 A (KONISHIROKU).	1	
A	----	2-12	
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			B 65 H
The present search report has been drawn up for all claims			
Place of search VIENNA		Date of completion of the search 16-12-1997	Examiner LOSENICKY
CATEGORY OF CITED DOCUMENTS 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			

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