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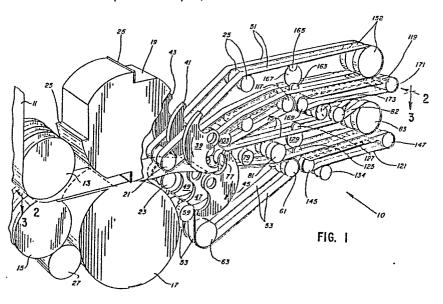
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54 Sheet diverting and delivery system.

An apparatus for diverting and delivering sheets in which the sheets are positively controlled throughout the entire operation. Initially, a continuous web of paper passes between opposing cylinders (19, 17) comprising a rotary cutter. The lead edge of the web is then engaged by a pair of opposed nip rollers (21, 23). Once held by these nip rollers, the rotary knife cuts a separate sheet from the front of the continuous web. The separate sheet then passes between and is accelerated by the nip rollers whereupon a dual set of diverting cams (39, 41, 43, 45, 47, 49), in combination with a pair of conveyors,

directs the sheet to one of two delivery systems. The next subsequent sheet is directed to the other delivery system so that each successive sheet is alternately diverted between the two delivery systems. Upon entering either delivery system, the sheet is subjected to a snubbing means which decelerates the sheet and further allows the next subsequent sheet to overlap the previous sheet before being similarly decelerated. The shingled sheets are then transmitted by conveyor to a subsequent handling operation.





## EUROPEAN SEARCH REPORT

Application Number

EP 87 10 5039

				EF 67 10 30.
· · · · · · · · · · · · · · · · · · ·	DOCUMENTS CONSIDERE	D TO BE RELEVA	NT	
Category	Citation of document with indication, where appropriate, of relevant passages		Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
Υ	EP-A-0 054 963 (MOTTER F * Page 1, lines 10-19; pa page 10, line 30; figures 373 713 (Cat. D)	ige 4, line 8 -	1-23	B 65 H 29/58
D,Y	US-A-3 994 221 (LITTLETO * Whole document *	(NO	1-23	
Y	EP-A-O 089 407 (M.A.NF * Whole document *	A-O 089 407 (M.A.NROLAND) hole document *		
Y	CH-A- 408 060 (ERK-MASO ING. AMIR ERK) * Whole document *	CHINENBAU DR.	10	
Y	DE-A-2 141 340 (DR. O. S * Whole document *	STRECKER)	18,19	
A	GB-A-2 059 392 (E.C.H. \ * Whole document *	√ILL)	1-23	·
A	US-A-4 040 617 (WALKING * Whole document *	TON)	13-23	TECHNICAL FIELDS SEARCHED (Int. Cl.4)
	·			
	The present search report has been draw	n up for all claims		
	Place of search Date of completion of the search			Examiner
TH	IE HAGUE	17-05-1988	ME	ULEMANS J.P.
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		E : earlier paten after the fili D : document ci L : document ci	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	