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(54) Web inspection and repair machine

(57) A device for the inspection and repair of a roll of web material includes an unwind mandrel (12), a rewind mandrel (14), an inspection area (16) and a splice area (18). A flaw in the web is detected at the inspection area (16), whereupon the web (21) is braked to a halt. Where the splice area (18) is adjacent to or coincident with the inspection area (16), the flawed portion of the web can pass well beyond the splice area (18) before the web (21) comes to a halt. Provided herein is a web-indexer device (32) that includes a reciprocating indexer

shuttle (50) having idler rolls (52,54,56,58) mounted thereon, with further idler rolls (60,62,64,66) mounted to the machine such that the web material (21) can be strung between them in a substantially boustrophedonic configuration. Control means are provided to allow the operator who has caused the web (21) to be braked to a halt upon detecting a flaw, to move the indexer frame (50) so as to retrieve a portion of the web so as to bring the flaw back to the splicing station (18) for repair, without having to reverse the rotational direction of the unwind mandrel (12) or the rewind mandrel (14).

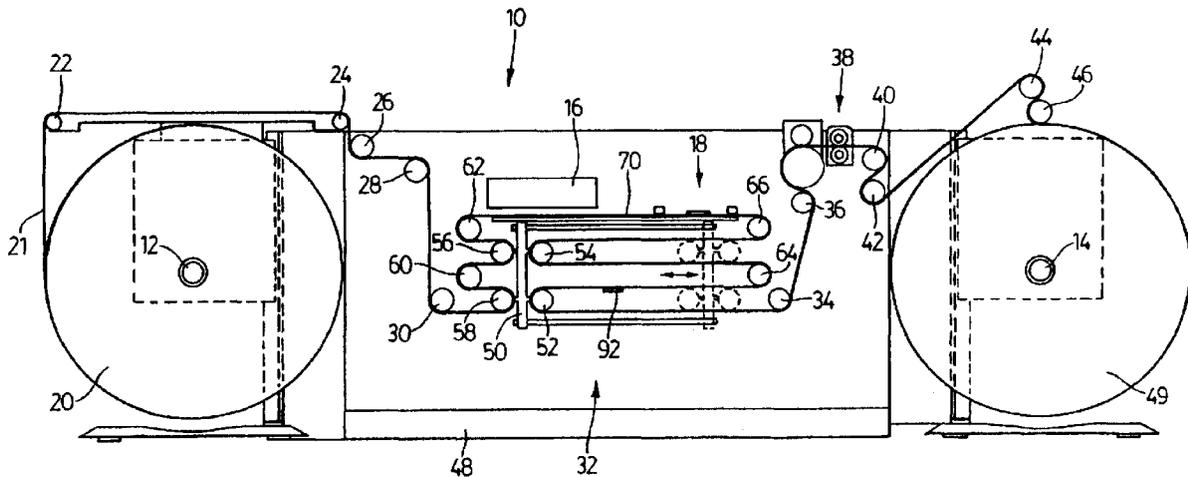


FIG. 6



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 97 30 6869

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.6)
A	DE 44 32 371 A (HEIDELBERGER DRUCKMASCH AG) * the whole document * ---	1,4	B65H20/24 B65H26/02
A	PATENT ABSTRACTS OF JAPAN vol. 013, no. 465 (M-882), 20 October 1989 -& JP 01 181666 A (SANYO KOKUSAKU PULP CO LTD), 19 July 1989, * abstract * ---	1,4	
A	GB 1 058 883 A (GLOUCESTER ENGINEERING COMP. INC.) * page 2, line 130 - page 3, line 20; figures 8-16 * * page 6, line 16 - line 70 * ---	1-6	
A	US 3 084 841 A (DAI NIPPON PRINTING) * column 1, line 23 - line 40 * ---	I-6	
A	DE 12 74 413 B (PACKMARK LIMITED) * column 2, line 44 - column 3, line 3 * -----	1-6	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			B65H
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 9 April 1998	Examiner Haaken, W
CATEGORY OF CITED DOCUMENTS		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	
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			

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