

EUROPEAN PATENT APPLICATION

Application number: **89202744.2**

Int. Cl.⁵: **B65H 45/20**

Date of filing: **31.10.89**

Priority: **07.11.88 IT 2253688**

Date of publication of application:
16.05.90 Bulletin 90/20

Designated Contracting States:
AT BE CH DE ES FR GB GR IT LI LU NL SE

Date of deferred publication of the search report:
06.06.90 Bulletin 90/23

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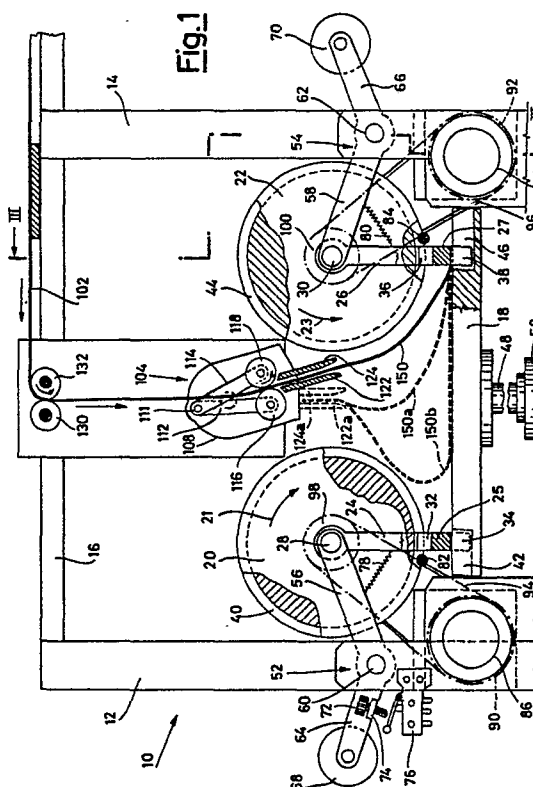
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High speed folding machine for elastic material bands.

Machine for high speed folding in accordion-like manner bands (102) of elastic materials such as paper, thin plastic laminates or metal sheets coming from coils on which they are stored in a rolled up form, comprising an orientable guide (104) launching said band (102) against an obstacle (24, 26) so as to cause a length of said band (102) to be bent in arc-shaped manner, thus forming a loop (150), towards a first roller (20) having circumferential grooves (40) and areas (136, 138, 140) having high friction coefficient with respect to the material of the band (102) to be folded, said roller (20) being rotated at a speed such that its peripheral speed is greater than the advancing rate of said band (102), whereby the loop (150) formed by said band (102) is drawn by said roller (20) up to impinge against relieves (32) engaged within said circumferential grooves (40), causing said band (102) to be pinched, thus forming a sharp fold and then to start again the arc shaped folding in the opposite direction until it comes into contact with said loop (150) a second roller (22), fully identical to the first one (20), whereby the band (102) is pinched between said roller (22) and corresponding relieves (36) engaged in circumferential grooves thereof (44), the band (102) being thus sharply folded again and returned towards said first roller (20), and so on, whereby an accordion folded package of band (166) is formed up to the desired size. The presence of possible crossing weakening

areas in said band (102) at regular spacings makes the size of the accordion folded zones essentially independent from the distance between said first and second rollers (20, 22).





DOCUMENTS CONSIDERED TO BE RELEVANT			EP 89202744.2
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. ³)
X	<u>DE - A1 - 3 708 016</u> (WOMAKO MA SCHINENKON- STRUKTIONEN GMBH) * Totality *	1,2,23	B 65 H 45/20
A	--	3,4,7, 12	
X	<u>DE - A1 - 2 704 502</u> (WÜRSCH WALTER) * Totality *	2,17, 23	
A	--		
	<u>GB - A - 2 177 686</u> (WOMAKO MASCHINENKON- STRUKTIONEN GMBH) * Totality * ----	1,2,23	
			TECHNICAL FIELDS SEARCHED (Int. Cl. ³)
			B 65 H 45/00
The present search report has been drawn up for all claims			
Place of search VIENNA		Date of completion of the search 22-03-1990	Examiner PFAHLER
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	