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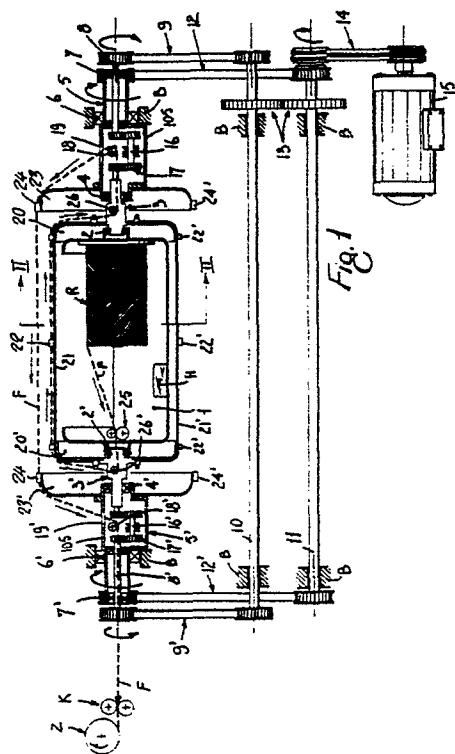
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(54) Four-twist twisting frame.

(57) The twisting frame is provided with two pairs of coaxial flyers (20-20', 23-23'), one of said pairs (23-23') being positioned at the side of the other flyers (20-20') and externally thereof, and presenting a greater dimension in length, while the flyers of each pair are of equal size. Means are provided for mutually synchronizing the flyers of each pair, while other means are provided for causing the outer flyers (23-23') to rotate in the opposite direction with respect to the inner flyers (20-20'), preferably at the same speed. The hollow shafts (5-5') carrying the outer flyers (23-23'), which are rotatably supported by the base structure (B) of the twisting frame, rotatably support the hollow shafts (3-3') of the inner flyers (20-20'), and these latter shafts in their turn rotatably support a cradle (1) inside which there are arranged the means (R) for feeding the yarn or sliver (F) to be twisted. The yarn (F) is subjected to a first twist as it reaches one flyer (20'), then it is subjected to a second and third twist as it is passed from one pair of flyers (20-20') to the other pair of flyers (23-23') and finally it is subjected to a fourth twist as it comes out of the last pair of flyers while cooperating with the drawing and collecting means (K, Z).

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EUROPEAN SEARCH REPORT

EP 87 10 0721

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	FR-A-2 235 217 (SLOVENSKA VEDECKOTECHNICKA SPOLOCNOST DOM TECHNIKY BRATISLAVA) * Page 2, line 14 - page 3, line 10 *	1, 2	D 01 H 1/10
Y	---	3	
Y	GB-A-1 145 261 (G.H. HANSEN) * Page 2, lines 116-125 *	3	
A	* Page 2, lines 89-93 *	4	
A	* Page 2, lines 99-101 *	8	TECHNICAL FIELDS SEARCHED (Int. Cl.4)
A	GB-A-1 227 376 (J.F.M. BONNABAUD) * Page 2, lines 36-52 *	4	D 01 H
A	---		
A	CH-A- 272 803 (W. KENGON & SONS LTD) * Page 2, lines 30-32 *	4	
A	* Page 3, line 56 - page 4, line 8 *	5, 6, 7	

The present search report has been drawn up for all claims			
Place of search	Date of completion of the search	Examiner	
THE HAGUE	09-11-1987	HOEFER W.D.	
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			