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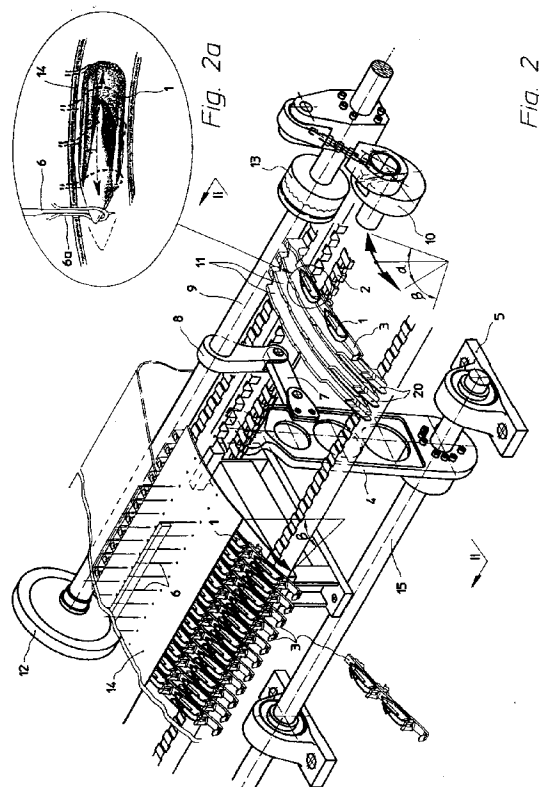
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(54) **Multi-needle knotted-stitch quilting machine wherein the shuttles follow an arc-shaped path**

(57) There is disclosed a multi-needle knotted-stitch quilting machine wherein the shuttles (1) advantageously follow an arc-shaped path instead of the rectilinear reciprocating motion according to the prior art. This path normally extends for an operating angle α while a manual or automatic control is provided, after disengaging said oscillating mechanism, for performing an additional rotation β of the shuttles so as to make them accessible by having them come out from the fixed needle plate (14), also curved. The side guides (11) of the shuttles, also arched, preferably have a rear extension (20) to hold the shuttles when they have been rotated beyond the normal angle of oscillation α . There are also provided kinematic counterweight, pneumatic, hydraulic or spring devices for balancing the assembly and dampening the vibrations.

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EUROPEAN SEARCH REPORT

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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	FR-A-532 313 (MASCHINENFABRIK KAPPEL) * the whole document *	1,2,5	D05B11/00 D05C11/18 D05C3/02
A	DE-C-280 245 (MASCHINENFABRIK KAPPEL) ---		
A	DE-C-286 538 (MASCHINENFABRIK KAPPEL) ---		
A	DE-C-279 662 (MASCHINENFABRIK KAPPEL) ---		
A	US-A-2 895 438 (N. SHOTSKY) ---		
A	US-A-3 695 196 (W.V. CODOS) -----		
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			D05C D05B
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 5 June 1996	Examiner D Hulster, E
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