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(54) Method of circulating a heat transfer medium through a caterpillar and a plate treating apparatus using the caterpillar.

(57) A method of circulating a heat transfer medium through a caterpillar (9) and a plate treating apparatus using the caterpillar. A rotary shaft (12) is arranged to transversely project into the caterpillar arranged in an article conveying direction. The caterpillar (9) is provided with a group of strip-shaped hot plates (8) disposed closely in parallel to each other, each hot plate (8) having an inlet and outlet of the heat transfer medium. A heat transfer medium passage is formed in each hot plate (8) to communicate the inlet and the outlet thereof. The rotary shaft (12) includes a heat transfer medium supplying portion (10) and a heat transfer medium discharging portion (11) separately formed therein from one end thereof to the other end. The heat transfer medium is sent from the supplying portion (10) of the rotary shaft (12) to the inlet of each hot plate (8) through a corresponding connecting tube (17), and then the medium is discharged from the outlet of the hot plate (8) to the discharging portion (11) through another connecting tube (17). The connecting tubes (17) are long enough to reach turning portions (16) of the caterpillar. The rotary shaft (12) and the caterpillar (9) are synchronously controlled in such a manner that the rotary shaft makes a revolution for a turn of the caterpillar.

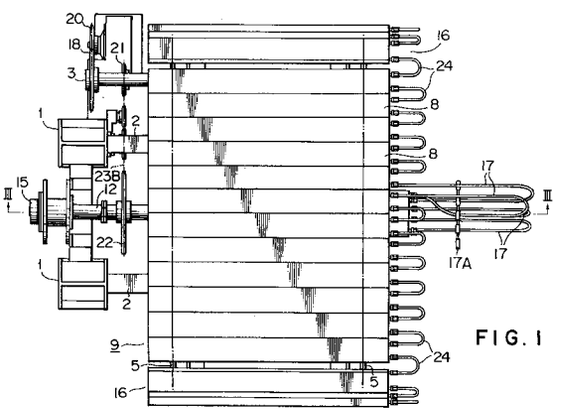

FIG. 1

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EUROPEAN SEARCH REPORT

Application Number

EP 90 12 3216

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.5)
X Y	DE-C-256 293 (GREDING) * the whole document *	1,2 3,6,7, 12,17, 22,25	F26B3/20 F26B15/18 F26B23/10 B27D3/04
A	---	8	B30B5/06 B30B15/34
Y A	DE-C-257 672 (GREDING) * the whole document * ---	3 13,21	
Y	US-A-2 071 999 (DIKE) * the whole document * ---	6,7,12, 17,22,25	
A	FR-A-2 412 395 (MARTIN) * the whole document * ---	22,23	
A	DE-C-803 759 (TESCHNER) ---		
A	US-A-2 365 804 (CLERKE) -----		

TECHNICAL FIELDS SEARCHED (Int. Cl.5)
F26B F25D B27D

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	30 SEPTEMBER 1992	SILVIS H.

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