

(19)



Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) Publication number:

0 309 023
A3

(12)

EUROPEAN PATENT APPLICATION

(21) Application number: **88201918.5**(51) Int. Cl.⁵: **B41F 13/10 , B41F 13/04**(22) Date of filing: **07.09.88**(30) Priority: **25.09.87 IT 2203487**(43) Date of publication of application:
29.03.89 Bulletin 89/13(84) Designated Contracting States:
AT BE CH DE ES FR GB GR IT LI LU NL SE(88) Date of deferred publication of the search report:
11.04.90 Bulletin 90/15(71) Applicant: **OFFICINE MECCANICHE SALVADE'**
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(54) **Device for guiding and regulating the forward step in operating machines with intermittent forward motion, particularly automatic screen printing machines.**

(57) This invention relates to a device for the control and regulation of the intermittent forward step of a machine equipped with a closed loop conveyor belt, or similar device, where the intermittent forward step must be highly precise, in particular when the belt is very long, even 80 m or more, said device having a primary specific application on machines for automatic screen-printing for which it was first produced.

It consists of the fact that a flexible magnetic transducer (11) is applied along the whole length of one of the edges of the conveyor belt (2), magnetised with alternating polarity at a constant step P, with which two magnetic sensors (12-13) interact, said sensors being positioned above the transducer (11) at an appropriate pre-set distance apart, equal to the real printing step Sr and in correspondance to the vertical axis of the transducer (11), the sensors (12-13) being connected to a step counter and being

capable of communicating with one another via a control unit (16), of a basically known design, so that the signal received by the sensor (13) and emitted from the point of the transducer (11), which at a given point of the operating cycle is located beneath the sensor (13), is sent by sensor (13) to sensor (12), which will cause the machine to stop beneath it only when it has read an identical signal, the machine stopping in correspondance to the same exact point of the transducer (11) and therefore of the conveyor belt (2) which was previously located beneath the sensor (13).

The distance Sr between the two sensors (12) and (13) can be varied since one of the sensors, for example sensor (13), is mobilely mounted on a rod (14) fixed to the machine and can run longitudinally along the rod (14) actuated by a small motor (15) and thus vary its distance from the sensor (12).

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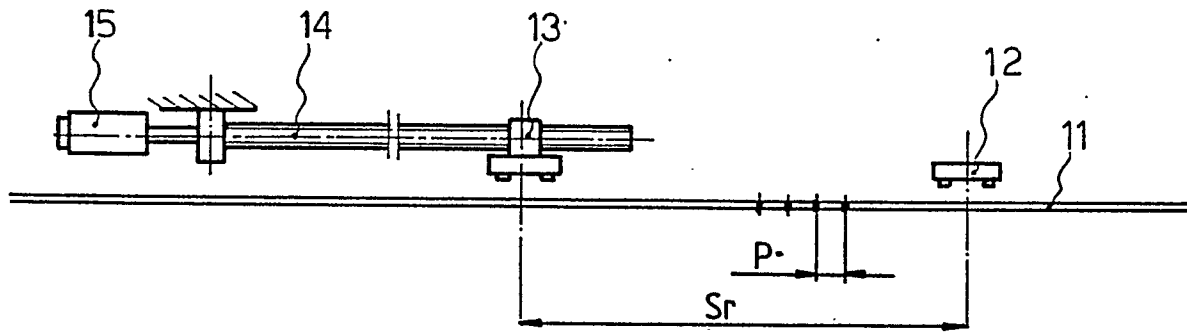


fig. 3



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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.4)
Y, D	EP-A-130751 (TOSHIN KOGYO CO. LTD) * page 6, line 13 - page 7, line 18 * ---	1-3	B41F15/10 B41F13/04
Y	GB-A-959972 (HEBERLEIN & CO AG) * page 6, lines 31 - 75 * ---	1-3	
A	GB-A-1082881 (KEUFFEL & ESSER) * page 6, lines 11 - 26 * ---	1	
A	PATENT ABSTRACTS OF JAPAN vol. 8, no. 259 (P-317)(1696) 28 November 1984, & JP-A-59 132010 (HITACHI SEISAKUSHO K. K.) 30 July 1984, * the whole document * -----	1	
			TECHNICAL FIELDS SEARCHED (Int. Cl.4)
			B41F G01D
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 31 JANUARY 1990	Examiner HAGBERG A. M. E.
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