

Title (en)

Device for guiding and regulating the forward step in operating machines with intermittent forward motion, particularly for automatic screen printing machines.

Title (de)

Vorrichtung zum Führen und Regulieren des Vorwärtsschrittes beim Betrieb von Maschinen mit intermittierender Vorwärtsbewegung, insbesondere für automatische Siebdruckmaschinen.

Title (fr)

Dispositif pour guider et régler le pas d'avance lors du fonctionnement de machines à mouvement d'avance intermittent, en particulier pour une machine automatique de sérigraphie.

Publication

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Application

EP 91200351 A 19910219

Priority

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Abstract (en)

[origin: EP0446977A1] The invention described here is a control device for regulating the intermittent forward feed step of machine that is fitted with a closed loop conveyor belt or similar piece of equipment, where great precision in the intermittent forward feed step is required, especially when the belt is of a considerable length, 80 metres or more. The device is especially applicable to automatic silk-screen printing machines, for which it has been constructed for the first time. The invention consists of a rotating incremental type encoder transducer (17 or 37) which is used to determine and encode the forward feed step (Sr) of the conveyor belt (2) and the encoder is inserted in a form of drive belt structure consisting of two gear wheels (14,15,16) or (24,25) around which a drive belt (13 or 23) with teeth on both sides passes. The drive belt is of the type currently normally used on industrial robots and plotters, and its teeth engage with a second toothed belt (11) which is attached to one of the sides of the conveyor belt on the machine, or with one of the side strips which make the belt more rigid and which has teeth (21) applied to its upper surface so as to form a flexible rack. <IMAGE>

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Cited by

CN102114728A; EP1095257A4; EP1233209A1; EP0736379A3; US6705962B2; US9243682B2; WO2014052353A1

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