Title (en)

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

Title (de)

Vorrichtung zum Regeln des Schrittes von intermittierend arbeitenden Maschinen, insbesondere selbsttätige Siebdruckmaschinen.

Title (fr)

Dispositif pour régler le pas d'une machine à avance par intermittence, en particulier des machines à imprimer du pochoir.

Publication

EP 0309023 A2 19890329 (EN)

Application

EP 88201918 A 19880907

Priority

IT 2203487 A 19870925

Abstract (en)

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) actuateed by a small motor (15) and thus vary its distance from the sensor (12).

IPC 1-7

B41F 13/04; B41F 13/10

IPC 8 full level

B41F 13/04 (2006.01); **B41F 15/10** (2006.01)

CPC (source: EP)

B41F 13/04 (2013.01); **B41F 15/10** (2013.01)

Cited by

ES2160034A1; EP0782922A1; EP0782921A1; CN110802936A

Designated contracting state (EPC)

AT BE CH DE ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)

EP 0309023 A2 19890329; **EP 0309023 A3 19900411**; IT 1222737 B 19900912; IT 8722034 A0 19870925

DOCDB simple family (application)

EP 88201918 A 19880907; IT 2203487 A 19870925