

Title (en)

A calibrating method for controlled-tension yarn feeders in weaving lines

Title (de)

Kalibrierverfahren für Garnzuführer mit geregelter Spannung in Webzeilen

Title (fr)

Procédé d'étalonnage pour passe-fils à tension contrôlée dans les machines à tisser

Publication

EP 2573027 A1 20130327 (EN)

Application

EP 12004518 A 20120615

Priority

IT TO20110840 A 20110920

Abstract (en)

The calibrating method is applied to weaving lines comprising a plurality of yarn feeders (D1, D2, ..., Dn) delivering respective yarns (F1, F2, ..., Fn) to a downstream machine (MU) via respective feeding paths. The operation of each feeder is controlled by a respective tension control loop subject to the output (TO) of a respective tension sensor (SD1, SD2, ..., SDn) to maintain the tension of the unwinding yarn substantially constant and equal to a desired tension (TD). A test cycle is carried out with all the feeding paths arranged at their exact operative configuration. During the test cycle, the tensions of all the yarns is subsequently measured in proximity of their respective insertion points into the machine (MU) by means of the same measuring device. For each feeder, a correction factor (K) is calculated on the basis of the ratio of the real tension (TM) measured by the measuring device (SR) to a reference tension (TR) input to the control loop. The respective correction factor (K) is applied to the control loop of each feeder to compensate for the difference between the measured real tension (TM) and the desired tension (TD).

IPC 8 full level

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CPC (source: EP)

B65H 59/388 (2013.01); **D04B 15/48** (2013.01); **B65H 2701/31** (2013.01)

Citation (applicant)

EP 1901984 A1 20080326 - B TSR INT SPA [IT]

Citation (search report)

- [AD] EP 1901984 A1 20080326 - B TSR INT SPA [IT]
- [A] US 2009178757 A1 20090716 - COCOVI JOSE [FR], et al
- [A] EP 1176244 A2 20020130 - SANGIACOMO SPA [IT]

Cited by

EP3763651A1; IT201900011451A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 2573027 A1 20130327; **EP 2573027 B1 20140813**; CN 103010835 A 20130403; CN 103010835 B 20161221; IT TO20110840 A1 20130321

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