Title (en)
METHOD FOR FEEDING A PLURALITY OF YARNS UNDER CONTROLLED TENSION TO A TEXTILE MACHINE

Title (de)
VERFAHREN ZUR ZUFÜHRUNG EINER VIELZAHL VON FÄDEN UNTER KONTROLLIERTER SPANNUNG AN EINE TEXTILMASCHINE

Title (fr)
PROCÉDÉ D'ALIMENTATION D'UNE PLURALITÉ DE FILS SOUS TENSION CONTRÔLÉE A UNE MACHINE TEXTILE

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Application
EP 20180925 A 20200618

Priority
IT 201900011451 A 20190711

Abstract (en)
A method for feeding a plurality of yarns under controlled tension to a textile machine by way of respective feeders (F1,1, F1,2 ..., FY,X), the tension of the yarn fed by a plurality of feeders (F1,1, F1,2 ..., FY,X) being monitored by respective tension sensors (S1,1, S1,2 ..., SY,X) which are arranged immediately downstream of the feeder and are connected to a control unit which modulates an adjustment parameter of the feeder on the basis of the signal received from the tension sensor (S1,1, S1,2 ..., SY,X) in order to stabilize the tension at an operating tension that can be configured by the user. The feeders (F1,1, F1,2 ..., FY,X) are located on multiple rows (LI, L2, ..., LY) at progressively increasing distances from the textile machine (M), and they undergo a calibration procedure for calibrating the respective operating tensions, in which a same operating tension is set which is equal to a desired tension, on two reference feeders (Fa, Fb) of one of the rows (LI, L2, ..., LY); the real tensions (TRa and TRb) are measured of the yarns (Ha and Hb) fed by the reference feeders (Fa, Fb) by way of respective tension sensors (Za and Zb) which are located immediately upstream of the textile machine (M); backwards-adjusting the operating tensions (TLa and TLb) of the reference feeders (Fa and Fb) so that the respective real tensions (TRa and TRb) correspond to the desired tension; the operating tension of the remaining feeders of the row is set on the basis of a preset function which correlates the position of the feeder with the respective operating tension and, in relation to the reference feeders (Fa and Fb), returns the operating tension values (TLa and TLb) that were adjusted previously.

IPC 8 full level
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Citation (applicant)
• EP 1901984 B1 20100922 - BTSR INT SPA [IT]
• EP 1901984 A1 20080326 - BTSR INT SPA [IT]
• IT 201900011451 A 20190711

Citation (search report)
[A] EP 2573027 A1 20130327 - LGL ELECTRONICS SPA [IT]

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