

Title (en)
DEVICE FOR CONTROLLING THE WEFT BAND TENSION ON A SHUTTLE, SHUTTLE AND CIRCULAR LOOM EQUIPPED THEREWITH

Title (de)
VORRICHTUNG ZUM REGELN DER SCHUSSBAENDCHENSPANNUNG AN EINEM WEBSCHUETZEN, DAMIT AUSGESTATTETE WEBSCHUETZEN UND RUNDWEBMASCHINE

Title (fr)
DISPOSITIF DE RÉGULATION DE LA TENSION DE RUBANS EN TRAME SUR UNE NAVETTE, NAVETTE AINSI CONFIGURÉE ET MÉTIER À TISSER CIRCULAIRE

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Abstract (en)
[origin: WO2010084074A1] The invention relates to a device for controlling the weft band tension (FS) on a shuttle (30) of a circular loom, wherein the shuttle (30) comprises a band redirecting apparatus (3) and a weft band spool (1), from which a weft band (2) can be pulled off over the band redirecting apparatus (3). The weft band tension (FS) that occurs when the weft band is pulled off deflects the band redirecting apparatus (3) against a restoring force (FR). The control device (20) comprises: a deflection sensor (5), which detects the instantaneous position of the band redirecting apparatus (3) and generates a deflection signal (5a) as a function of the detected position, an arithmetic-logic unit (12), to which the deflection signal (5a) can be fed, and a variable electromechanical load (6, 14), which exerts a variable braking torque (7) on the weft band spool (1) according to a controlled variable (u). The arithmetic-logic unit (12) calculates the controlled variable (u) for setting the variable electromechanical load (6, 14) from the deflection signal (5a) fed to the arithmetic-logic unit so that a target value of the position of the band redirecting apparatus (3) and thus also a target value of the weft band tension (FS) are set.

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