

Title (en)

Weft-brake control apparatus for weaving looms

Title (de)

Schussfadenbremsesteuereinrichtung für Webmaschinen

Title (fr)

Dispositif de commande de frein de fil de trame pour métiers à tisser

Publication

EP 1405941 A1 20040407 (EN)

Application

EP 03020834 A 20030913

Priority

IT TO20020857 A 20021004

Abstract (en)

A weft-brake control apparatus comprises a weft feeder, a loom, a weft-brake having a braking member operated by an electric motor, and a position-control loop to receive a desired angular position signal and a measured position signal of the motor. The measured position signal is calculated by a position estimator from a signal proportional to the current across the motor and a signal proportional to the voltage on the power leads of the motor. A weft-brake control apparatus comprises a weft feeder provided with a stationary cylinder on which loops of yarn are wound to form a weft reserve and with a weft-stopping member to release predetermined quantities of yarn per each insertion cycle; a loom downstream of the weft feeder; a weft-brake arranged between the cylinder and loom, and provided with a braking member operated by an electric motor (M) to engage a length of the yarn causing the yarn to be braked by friction; and a position-control loop for the motor, comprising a subtracting node (1) to receive a desired angular position signal and a measured position signal of the motor and to generate a position error signal from their difference. The measured position signal is calculated by a position estimator (SP) from a signal proportional to the current across the motor and a signal proportional to the voltage on the power leads of the motor.

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CPC (source: EP)

D03D 47/34 (2013.01)

Citation (search report)

- [A] WO 0044970 A1 20000803 - TE STRAKE BV [NL], et al
- [A] WO 0210493 A1 20020207 - IROPA AG [CH], et al
- [A] EP 0467059 A1 19920122 - VAMATEX SPA [IT]

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CN113174684A; CN111041638A; CN103092091A; EP1659201A1; CN102618998A; US7584014B2

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