Title (en)

Method and device for positioning warp threads in a loom and loom with such a device

Title (de)

Vorrichtung und Verfahren zum Positionieren der Kettfäden einer Webmaschine sowie Webmaschine mit einer solchen Vorrichtung

Title (fr)

Procédé et dispositif de positionnement des fils de chaîne d'un métier à tisser et métier à tisser équipé d'un tel dispositif

Publication

EP 1063326 A1 20001227 (FR)

Application

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Priority

FR 9908340 A 19990625

Abstract (en)

At a loom harness, where the warps are moved to form the shed for weft insertion, a common monitor (20,21) registers the presence of all the warps (1) moved by different electrical actuators (6), to establish the passage of at least one warp in a set position. A further monitor (10) registers the value (θ 0) of a parameter (θ) of the actuator (6) command, according to the passage of the warp (1) in the given position. A warp (1) to be registered (S2) is shifted into the set position, and the parameter (θ) for the actuator (6) command is selected during the warp movement in that position, and the selected parameter value (θ 0) is used as a reference value for the actuator (6) command. The first monitor (20,21) is mounted to the loom frame, with a transmitter (20) to generate a wave signal to be registered by a facing receiver cell (21) on the other side of the warps (1), which can detect a signal change. The transmitter (20) can be a helium-neon gas laser or a laser diode, which sends a laser beam (22), and the receiver (21) determines any change in the laser beam intensity while the warps (1) are in the beam path. The receiver can have a thread structure, aligned on a global direction (F2) parallel to the wefts. The first monitor can have a trolley moving along a support parallel to the warps, fitted with a receiver by a contact to act selectively with one of the warps. The trolley is integrated with an extension, to make contact with certain warps. The contacts between the warps and the extension generate a force to shift the trolley on its support. An Independent claim is included for a warp displacement action where at least one warp (1) is shifted by an actuator (6). The passage of at least one warp is registered (S2) at a given position. A value is selected of a command parameter (θ) for the actuator during the passage of the warp in the set position, and the selected value (θ 0) is used as a reference value for the command of the actuator. Preferred Features: The selected parameter value (θ 0) is used for that parameter to determine at least one control value of the parameter matching at least one particular point in the warp (1) movement through the action of the actuator (6). A number of warps can be shifted by a single actuator, where their passage is detected at a given point, and a selected parameter value (θ 0) is used to control the actuator for at least one warp.

IPC 1-7

D03C 3/20; D03C 13/00

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CPC (source: EP US)

D03C 3/20 (2013.01 - EP US); **D03C 3/205** (2013.01 - EP US); **D03C 13/00** (2013.01 - EP US)

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