

Title (en)

Method for controlling weft releasing and stopping operation on yarn storage devices in looms

Title (de)

Verfahren zum Überwachen des Schussfadenfreigabe- und Stoppvorganges an Vorspulgeräten für Webmaschine

Title (fr)

Procédé pour contrôler l'opération de libération et d'arrêt du fil de trame sur les dispositifs de stockage de fil dans les métiers à tisser

Publication

EP 0962566 A2 19991208 (DE)

Application

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Priority

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Abstract (en)

To monitor the weft yarn release and stop actions, at a loom supply bobbin, during the electrical control of the stopper unit the functional efficiency of the bobbin assembly is established through the development of a known characteristic in the curve of the control current (I) over time (t) as a significant value. The absence of the characteristic is signaled, or a known time shift of it, in the control of the loom. The correct function of the weft release is monitored through a comparison of actual and nominal appearance time (DELTA t1) of the characteristic and a deviating appearance time (DELTA t1'). The correct yarn stop action is given by a position signal from the stopper. The stopper action is through a mechanical resetting of the stopper. On using a reverse lifting magnet for the stopper, the stroke movements are monitored selectively by the characteristic on releasing or stopping the weft yarn. A multiple deviation (DELTA t1') from the nominal appearance time (DELTA t1) is interpreted as wear, and an appropriate report is generated. An Independent claim is included for a loom weft bobbin feed system where, in addition to the characteristic (2), a characteristic is taken from the control current for the stopper to monitor the functional efficiency of the stopper. At least the characteristic to monitor the main blower jet valve and the stopper monitoring characteristic are checked in the loom control to test for a time coincidence. A fault signal for a display and/or to stop the loom is generated if at least one characteristic lies outside the time coincidence window. Preferred Features: The time of the coincidence, or the time coincidence window, matches a rotary angle or rotary angle range at the main shaft of the loom.

Abstract (de)

Aufgabe der Erfindung ist es, die Ist-Schaltzeiten der Faden-Stoppereinrichtung eines mit einer Webmaschine wirkverbundenen Vorspulgerätes im Hinblick auf unzulässige Abweichungen gegenüber Soll-Schaltzeiten zu überwachen. Erfindungsgemäß wird die Aufgabe dadurch gelöst, dass während der elektrischen Ansteuerung der Faden-Stoppereinrichtung ein auftretendes an sich bekanntes charakteristisches Merkmal im Steuerstromverlauf (I) über die Zeit (t) als signifikante Größe zum Feststellen der Funktionstüchtigkeit der Faden-Stoppereinrichtung verwendet wird.
<IMAGE>

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