

Title (en)

METHOD FOR OPTIMIZING AND MONITORING WEFT INSERTION IN POWER LOOMS

Title (de)

VERFAHREN ZUM OPTIMIEREN UND ÜBERWACHEN DES SCHUSSEINTRAGES AUF WEBMASCHINEN

Title (fr)

PROCEDE POUR L'OPTIMISATION ET LA SURVEILLANCE DE L'INSERTION DE TRAME SUR DES METIERS A TISSER

Publication

EP 1163384 B1 20030910 (DE)

Application

EP 00922537 A 20000322

Priority

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- EP 0002541 W 20000322

Abstract (en)

[origin: US6467512B1] A method for monitoring the cycle of the weft insertion into a weaving machine. The weft yarn passes a yarn brake and a yarn force sensor and the force acting on the weft yarn is measured in a known fashion and the reaction force of the yarn is converted by a pressure sensitive element into an electrical signal. The electrical signal outputted by the yarn force sensor is electronically amplified in an evaluation unit, is evaluated and is transmitted to an indicator informing the operator of the development of the weft insertion and of disturbances and corrections. For this purpose, the evaluation unit is connected via a data line with a machine control unit. Evaluation unit is supplied with time signals from the machine control unit associated with further machine functions participating at the weft insertion, e.g. the momentary angular position of the main shaft of the machine. The machine control unit receives monitoring signals of the yarn force evaluation via the data line, e.g. for immediate stoppage in case of a yarn breakage occurring during the weft insertion, or to activate a machine related alarm system in case of a disturbance needing the interference by an operator.

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IPC 8 full level

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