

Title (en)  
METHOD OF CONTROLLING THE COURSE OF THE LIFTING FUNCTIONS OF THE MAIN MECHANISMS OF A WEAVING MACHINE

Title (de)  
VERFAHREN ZUR STEUERUNG DES VERLAUFS DER HUBFUNKTIONEN DER HAUPTMECHANISMEN EINER WEBMASCHINE

Title (fr)  
PROCÉDÉ DE CONTRÔLE DU DÉROULEMENT DES FONCTIONS DE LEVAGE DES MÉCANISMES PRINCIPAUX D'UNE MACHINE À TISSER

Publication  
**EP 3751036 A1 20201216 (EN)**

Application  
**EP 20179228 A 20200610**

Priority  
CZ 2019371 A 20190613

Abstract (en)  
The invention relates to a method of controlling the course of lifting functions of the main mechanisms of a weaving machine, in which each of the mechanisms is provided with an individual drive, whereby each of the drives comprises a servomotor with a controllably variable angular speed during one revolution of the servomotor. The angular speed of the servomotor (4) of the beating-up mechanism (1) and the angular speed of the servomotor (5) of the shedding mechanism (2) varies during one revolution of the servomotor (4, 5) according to the selected unevenness of operation (A%) depending on the operating frequency (n) of the weaving machine to maximize the insertion angle and the time for the implementation of weft insertion, whereby the value of a dynamic parameter selected from the group of dynamic parameters consisting of the quadratic mean of the course of the driving torque, the quadratic mean of the performance, the maximum value of the performance, the mean value of the driving torque, the mean value of the performance, the loading of the members of the transformation mechanisms or the service life of the bearings loaded by reaction forces, and calculated for the interval of one revolution of the main virtual shaft is maintained for all operating frequencies of the machine at the same selected level.

IPC 8 full level  
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CPC (source: CZ EP)  
**D03D 49/64** (2013.01 - EP); **D03D 51/005** (2013.01 - EP); **D03D 51/12** (2013.01 - CZ); **D03D 51/14** (2013.01 - CZ); **D03D 51/16** (2013.01 - CZ)

Citation (applicant)  
• CZ 302120 B6 20101020 - VATS [CZ]  
• CZ 302391 A3 19930414 - GUERCI SERGIO [IT]

Citation (search report)  
• [A] US 2006207674 A1 20060921 - SAMPERS DIRK [BE]  
• [A] JP H10130987 A 19980519 - TOYODA AUTOMATIC LOOM WORKS  
• [A] US 2008135122 A1 20080612 - DONNER ALBRECHT [DE]

Cited by  
CN113742931A

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