

Title (en)
Fibre length measuring

Title (de)
Faserlängenmessung

Title (fr)
Mesure de la longueur de fibres

Publication
EP 1167590 A2 20020102 (DE)

Application
EP 01114142 A 20010611

Priority
CH 12432000 A 20000623

Abstract (en)
At a carding machine, the burl count and/or fiber staple length is measured before and/or after a carding unit in the carding assembly. The measurements are passed to a control, to determine the optimum machine settings from stored data, to activate at least one actuator to alter the gap between the feed roller and licker-in and/or the clamping gap and/or the clamping force of the feed trough at the licker-in. The carding machine control triggers at least one actuator to vary the rotary speed of the licker-in(s). One actuator in the system affects the transfer factor to pass a part of the fiber mass at the carding drum to the doffer. At least one actuator varies the card output, especially the delivery speed or the sliver weight. The optimized machine setting data are applied to at least one actuator which can act on the burl count and/or fiber staple length and especially for an initial cleaning machine or an actuator at the filling shaft in front of the card. The burl count and/or fiber staple length is measured before and/or after sections of the cleaning machine, to be used to derive the optimized machine setting data at the control to be applied to the cleaning machine or an initial fiber processing station. At least one actuator acts on the rotary speed of the cleaning or opening roller, and at least one actuator sets the grid or the grid angle, and another actuator sets the clamping gap and/or the clamping force of the feed trough to the cleaning or opening roller. The cleaning machine is a bale breaker with fine and coarse cleaning stages. The control gives optimized machine setting data based on stored characteristic fields or data sets. At least two control functions are used in combination with each other. An Independent claim is included for a carding machine with actuators to affect various operating parameters. Preferred Features: The burl count and/or fiber staple length measurement, and their evaluation, are carried out while the carding machine is in operation.

Abstract (de)
Vorliegende Erfindung befasst sich mit der Anwendung der Faserlängenmessung in der Putzerei oder Karderie einer Spinnerei. Es wird ein Verfahren und eine Vorrichtung in einer Textilverarbeitungsmaschine beschrieben und beansprucht, bei welcher vor und/oder nach einem Arbeitselement der Textilverarbeitungsmaschine die Nissenzahl und/oder die Faserlänge (Stapel) bestimmt wird, wobei eine Regelung/Steuerung vorgesehen ist, welche die genannten Werte für Faserlänge und/oder Nissenzahl als Eingabegrößen erhält und daraus optimierte Maschineneinstelldaten bestimmt und diese an mindestens einen die Nissenzahl und/oder den Stapel der Textilverarbeitungsmaschine beeinflussenden Aktor ausgibt. <IMAGE>

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