

Title (en)
METHOD AND ARRANGEMENT FOR DETERMINING THE YARN QUALITY AND/OR SPOOL QUALITY OF A RUNNING THREAD BASED ON LASER-DOPPLER ANEMOMETRY

Title (de)
VERFAHREN UND ANORDNUNG ZUR BESTIMMUNG DER GARNQUALITÄT UND/ODER SPULENQUALITÄT EINES LAUFENDEN FADENS AUF BASIS DER LASER-DOPPLER-ANEMOMETRIE

Title (fr)
PROCÉDÉ ET AGENCEMENT POUR DÉTERMINER LA QUALITÉ DU FIL ET/OU LA QUALITÉ DE BOBINE D'UN FIL CONTINU À L'AIDE D'ANÉMOMETRIE LASER DOPPLER

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Abstract (en)
[origin: WO2008012093A2] The invention relates to a method for non-contacting determination and/or increasing the yarn quality of a running thread (8) or the quality of a spool (20) which is obtained by winding up a running thread (8), or for a non-contacting determination of a possible breakage and/or jamming of a running thread (8), by means of a sensor device which is arranged at a spool point (6) in a textile machine, with a laser beam (3) being produced by a light source (2) and being split by means of an optical splitting and guidance device (4) for splitting and guidance of the laser beam (3) into at least two beam elements (5a, 5b), which are then guided such that they are joined together again at the thread (8), with the laser-doppler anemometry method being used to produce measurement signals from the light which is reflected from the thread (8), which measurement signals are evaluated electronically in order to determine the yarn quality of the running thread (8), with respect to its hairiness or in order to determine the spool quality or to determine thread breakage and/or thread jamming. The invention also relates to an arrangement which is suitable for carrying out this method.

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