

Title (en)
Method and device for centrifugal spinning

Title (de)
Verfahren und Vorrichtung zum Zentrifugenspinnen

Title (fr)
Procédé et dispositif pour le filage centrifuge

Publication
EP 1076123 B1 20040331 (DE)

Application
EP 00114596 A 20000707

Priority
DE 19938433 A 19990813

Abstract (en)
[origin: EP1076123A1] For centrifugal yarn spinning, a number of spinning stations each have their dedicated drawing units to deliver drawn sliver through tubes to the spinning centrifuges. At the start of a spinning cycle by the spinning machine (10), the separate spinning stations are checked for the presence of yarn debris. The rotating frequency of the yarn leg (20) is measured at the separate spinning stations, for comparison with a nominal rotating frequency. The rotating frequency is monitored by a sensor (28) which registers the movement of the yarn (18), and the rotating frequency is established proportional to the rotating frequency of the yarn balloon. The rotating frequency is filtered out of the noise signal representing the yarn movement. The filtered frequency signal is analyzed, especially by a fast Fourier transformation. For the comparison, nominal values are taken from known geometric measurements and especially the known radius of an empty centrifuge. The rotating frequency is measured at the rotating yarn legs of all the spinning stations (12) simultaneously, at the spinning machine, and compared with each other. On detection of yarn debris (30) in a spinning centrifuge, the sliver stop (54) is activated at the drawing unit for that spinning station (12). An Independent claim is included for a centrifugal spinning machine with a sensor (28) at each spinning station to register physical values during a spinning cycle. These measurements are used to determine the loading condition of each spinning centrifuge (14).

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D01H 1/08; D01H 13/16

IPC 8 full level
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Cited by
EP3543383A1; EP3623506A1

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