Title (en)

METHOD AND APPARATUS FOR DETERMINING THE SIZE OF CROSS-WOUND PACKAGES AND FOR UTILISING THE RESULTS

Publication

EP 0335080 A3 19900124 (DE)

Application

EP 89101884 A 19890203

Priority

DE 3810365 A 19880326

Abstract (en)

[origin: EP0335080A2] Sensors detect the growth of the cross-wound bobbin. In the first place, a spooling-station computer deduces from the measured values the bobbin circumference or bobbin radius y1 to y6 by conversion at the times x1 to x6. From these highly dispersed intermediate values, the spooling-station computer or a central computer, to which the spooling-station computer or computers are connected, calculates a compensating function y = f (x) which reflects the current bobbin circumference or bobbin radius from which random spooling events have been removed. The current bobbin circumference or bobbin radius thus determined is, if appropriate, fed back to the spooling-station computer and there triggers activities, such as, for example, influence on the spooling operation, determination of the yarn length and/or conclusion of the spooling operation. The result is a qualitatively better monitoring of the spooling operation and/or an improved bobbin quality as a result of a regulating influence on the spooling operation itself and as a result of a reproducible accurate determination of the yarn length or bobbin diameter. <IMAGE>

IPC 1-7

B65H 63/08

IPC 8 full level

B65H 63/08 (2006.01)

CPC (source: EP US)

B65H 63/082 (2013.01 - EP US); B65H 2511/11 (2013.01 - EP US); B65H 2513/11 (2013.01 - EP US); B65H 2515/12 (2013.01 - EP US); B65H 2557/24 (2013.01 - EP US); B65H 2701/31 (2013.01 - EP US)

Citation (search report)

- [A] FR 2517657 A1 19830610 - LOEPFE AG GEB [CH]
- [A] EP 0124475 A2 19841107 - LOEPFE AG GEB [CH]
- [AP] EP 0291712 A1 19881123 - SCHLAFHORST & CO W [DE]
- [A] DE 3529663 A1 19860424 - LOEPFE AG GEB [CH]
- [A] MEASUREMENT AND CONTROL. vol. 19, März 1986, LONDON GB Seiten 69 - 73; G. C. Dean: "An introduction to Kalman filters"
- [A] REVIEW OF SCIENTIFIC INSTRUMENTS. vol. 57, no. 11, November 1986, NEW YORK US Seiten 2862 - 2869; William S. Cooper: "Use of optimal estimation theory, in particular the Kalman filter, in data analysis and signal processing"

Cited by

EP0837024A3; EP0648701A1; DE19548256A1; EP0749929A3; DE10206761A1; EP1110896A3; EP1502978A3; EP1775360A3

Designated contracting state (EPC)

CH DE FR IT LI

DOCDB simple family (publication)

DE 3810365 A1 19891005; DE 58904385 D1 19930624; EP 0335080 A2 19891004; EP 0335080 A3 19900124; EP 0335080 B1 19930519; JP 2735605 B2 19980402; JP H01281269 A 19891113; US 4964582 A 19901023

DOCDB simple family (application)

DE 3810365 A 19880326; DE 58904385 T 19890203; EP 89101884 A 19890203; JP 7205089 A 19890327; US 32896389 A 19890327