

Title (en)

Winding machine in particular for sensitive material

Title (de)

Spulmaschine für insbesondere empfindliches Spulgut

Title (fr)

Machine de bobinage notamment pour du matériau sensible

Publication

**EP 1190974 A3 20030305 (DE)**

Application

**EP 01121322 A 20010906**

Priority

DE 10046844 A 20000920

Abstract (en)

[origin: EP1190974A2] The bobbin winder (1), especially for delicate yarns (8), has feed rollers (11) and a powered bobbin spindle (4). A monitor (14) registers the yarn tension, and generates proportional signals to the control for the bobbin spindle and the reciprocating yarn guide (10). The yarn tension monitor has a single roller (16) on a cantilever arm (15) with a restricted movement. The monitor roller deflects the yarn path from the feed to the yarn guide, without additional deflection rollers. The bobbin winder, for delicate yarns, has a cantilever to support the monitor roller. The monitor has at least one sensor to register the bending movements of the cantilever, and generate a signal proportional to the detected movements. The cantilever arm can be a weighing beam, to register the force of the yarn on the roller, and generate a proportional signal. The cantilever beam is fitted with expansion measurement strips at its nominal bending zone. The bending beam can be within a housing tube, with adjustable limit stops to set the movement range. The winder has a number of bobbin winding heads, each with a drive spindle and a reciprocating yarn guide. Each bobbin winding head has its own yarn tension monitor, with a single roller, within a separate machine unit (13).

IPC 1-7

**B65H 59/40**; G01L 5/10

IPC 8 full level

**B65H 54/22** (2006.01); **B65H 54/70** (2006.01); **B65H 59/40** (2006.01); **B65H 63/028** (2006.01); **G01L 5/10** (2006.01)

CPC (source: EP US)

**B65H 59/40** (2013.01 - EP US); **B65H 2553/21** (2013.01 - EP US); **B65H 2701/31** (2013.01 - EP US)

Citation (search report)

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