

Title (en)
Yarn winder

Title (de)
Vorrichtung zum Aufwickeln eines Fadens

Title (fr)
Bobinoir pour fil textile

Publication
EP 1048601 B1 20031112 (DE)

Application
EP 99113889 A 19990716

Priority
CH 80699 A 19990430

Abstract (en)
[origin: EP1048601A1] The bobbin winder assembly, with a reciprocating yarn guide (6), has a sensor coupled to the yarn guide to measure the length and position of the bobbin sleeve (3) in relation to a reference point of the yarn guide (6). According to the monitored measurement the stroke movement of the yarn guide (6) is positioned. Before bobbin winding starts, the yarn guide (6) is moved along at least one full stroke movement, for the measurements. The sensor is a monitor (14) coupled to the yarn guide (6), or it is the yarn guide itself. It is connected to a control (13) where sensor signals are arranged unambiguously with each guide stroke movement. The sensor has an inductive or optical action, or is mechanical feeler (6,14). The bobbin sleeve (3) has at least one flange (4) to be detected by a mechanical feeler (6,14). Before winding starts, the yarn guide (6) is given at least two full stroke movements at different gaps from the sleeve mantle, for the contour of at least one flange (4) to be computed by the control (13). The yarn guide (6) is powered by a motor (10) to give the guide (6) an unambiguous stroke position in relation to the rotary position of the rotor. The motor (10) is linked to the control (13). The sensor registers the free length of the bobbin sleeve (3) between the inner flanks of the end flanges (4). With an inductive optical sensor, the position of the inner flanks of the sleeve flanges (4) is registered by an abrupt change in the signals. With mechanical feeler, (6,14) the location of the inner flanks of the bobbin flanges (4) is detected by a sudden increase in the motor (10) current.

IPC 1-7
B65H 54/28

IPC 8 full level
B65H 54/28 (2006.01); **B65H 67/06** (2006.01)

CPC (source: EP)
B65H 54/2821 (2013.01); **B65H 54/286** (2013.01); **B65H 54/2884** (2013.01); **B65H 2551/22** (2013.01); **B65H 2553/24** (2013.01); **B65H 2553/25** (2013.01); **B65H 2701/31** (2013.01)

Cited by
DE102005029150B3; DE102011083104A1; DE102005001094A1; DE102011015802A1; WO2012130647A1

Designated contracting state (EPC)
BE CH DE ES FR GB IT LI

DOCDB simple family (publication)
EP 1048601 A1 20001102; **EP 1048601 B1 20031112**; DE 59907716 D1 20031218

DOCDB simple family (application)
EP 99113889 A 19990716; DE 59907716 T 19990716