

Title (en)

Yarn feeder provided with a weft-winding drum and with a feedback-controlled, weft-braking device

Title (de)

Garnzuführvorrichtung mit Schussfaden-Wickeltrommel und feedbackgesteuerter Schussfaden-Bremsvorrichtung

Title (fr)

Dispositif d'alimentation en fil pourvu d'un tambour à canetage et avec dispositif double face commandé par rétroaction

Publication

EP 2829647 B1 20170816 (EN)

Application

EP 14001766 A 20140520

Priority

IT TO20130616 A 20130722

Abstract (en)

[origin: EP2829647A1] A drum (12) has a yarn (Y) wound thereon which is adapted to be unwound upon request of a downstream textile machine. A passive weft-braking device (22) exerts a predetermined, uncontrolled braking action upon the yarn (Y). A controlled weft-braking device (24) arranged downstream of the passive weft-braking device (22) is provided with a first series of comb-like arranged prongs (36) and with a second series of comb-like arranged prongs (40) inserted in an alternated configuration between the prongs (36) of the first series. The yarn (Y) runs in a zig-zag manner between the two series of prongs (36, 40) and receives a braking action by friction from them, which changes in strength depending on their relative position. A motor (46) drives the second series of prongs (40) with respect to the first one for adjusting the strength of the braking action. A tension sensor (50) measures the tension of the yarn (Y) unwinding from the drum (12) and generates a corresponding tension signal (T). A control unit (CU) controls the motor (46) by feedback based on the tension signal (T), in such a way as to stabilize the tension of the yarn (Y) on a desired level.

IPC 8 full level

D03D 47/34 (2006.01); **B65H 59/30** (2006.01); **D03D 47/36** (2006.01); **D04B 15/44** (2006.01); **D04B 15/48** (2006.01)

CPC (source: EP)

B65H 59/30 (2013.01); **D03D 47/347** (2013.01); **D03D 47/366** (2013.01); **D04B 15/44** (2013.01); **D04B 15/484** (2013.01); **B65H 2701/31** (2013.01)

Cited by

EP3521493A1; CN105332152A; CN105177834A; IT201800002247A1; DE102021118859A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

EP 2829647 A1 20150128; EP 2829647 B1 20170816; CN 104326308 A 20150204; CN 104326308 B 20181009; IT TO20130616 A1 20150123

DOCDB simple family (application)

EP 14001766 A 20140520; CN 201410344435 A 20140718; IT TO20130616 A 20130722