

Title (en)

Yarn-unwinding sensor for storage yarn feeders with rotary drum

Title (de)

Garnabspulsensor für Garnvorratsvorrichtungen mit Drehtrommel

Title (fr)

Capteur de déroulement de fil pour les dispositifs d'alimentation en fil à tambour rotatif

Publication

EP 2907908 A1 20150819 (EN)

Application

EP 14003877 A 20141118

Priority

IT TO20140120 A 20140213

Abstract (en)

A yarn feeder is provided with a motorized, yarn-winding rotary drum (12) which is rotatable with respect to a motor-housing (16) and is adapted to have a plurality of yarn loops (Y) wound on itself, which are adapted to be unwound upon request from a downstream machine. A sensor comprises light-emitting means (42) and light-receiving means (44), at least one of which is to be fixed to the rotary drum (12), which operatively define a light connection passing through a detection area (30c) of the rotary drum (12) which is adapted to be repeatedly engaged by the yarn during its rotational unwinding movement. The unwinding of yarn from the rotary drum is determined on the basis of the variation of light resulting from the yarn (Y) transiting on the detection area (30c).

IPC 8 full level

D04B 15/48 (2006.01); **B65H 51/20** (2006.01); **B65H 51/22** (2006.01)

CPC (source: EP)

D04B 15/482 (2013.01); **D04B 15/486** (2013.01)

Citation (applicant)

EP 2592032 A1 20130515 - BTSR INT SPA [IT]

Citation (search report)

- [AD] EP 2592032 A1 20130515 - BTSR INT SPA [IT]
- [A] WO 9635834 A1 19961114 - FABSCHITZ HEINRICH [DE]
- [A] US 6125663 A 20001003 - WEBER FRIEDRICH [DE]

Cited by

CN112582129A; JP2020041251A; US11560657B2; US11352725B2; EP3620561B1; EP3620561A1

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 2907908 A1 20150819; EP 2907908 B1 20160622; CN 104846533 A 20150819; CN 104846533 B 20190308

DOCDB simple family (application)

EP 14003877 A 20141118; CN 201410748555 A 20141209