

Title (en)

YARN WINDING MACHINE AND YARN WINDING METHOD

Title (de)

GARNWICKELMASCHINE UND GARNWICKELVERFAHREN

Title (fr)

MACHINE DE RENVIDEUR DE FIL ET PROCEDE DE RENVIDAGE DE FIL

Publication

EP 3072840 A1 20160928 (EN)

Application

EP 16166163 A 20150602

Priority

- JP 2014142085 A 20140710
- EP 15170253 A 20150602

Abstract (en)

A yarn winding machine comprising: a yarn supplying section (9) adapted to supply a yarn (10); a yarn pooling device (22) adapted to pool the yarn (10) supplied by the yarn supplying section (9); and a winding section (26) adapted to wind the yarn (10) from the yarn pooling device (22) to form a package (50) and includes a rotation driving unit (54) adapted to rotate the package (50), wherein the winding section (26) is adapted to cause the rotation driving unit (54) to stop rotation of the package (50) before the yarn (10) is disconnected or after the yarn (10) is disconnected but before a yarn end is wound onto the package (50), further comprising: a second yarn monitoring device (70) arranged between the yarn supplying section (9) and the yarn pooling device (22) and adapted to monitor a state of the yarn (10); a second yarn cutting device (9) adapted to cut the yarn (10) upstream of the yarn pooling device (22) when the second yarn monitoring device (70) detects a yarn defect; a yarn joining device (23) adapted to join the yarn (10a) from the yarn supplying section (9) and the yarn (10b) from the winding section (26); and a catching and guiding device (28) adapted to catch the yarn (10b) from the winding section (26) and to guide the yarn (10b) to the yarn joining device(23), wherein the winding section (26) is adapted to stop the rotation of the package (50) such that a yarn end formed by the cutting of the yarn (10) by the second yarn cutting device (9) is positioned at a predetermined position on a yarn traveling path.

IPC 8 full level

B65H 51/22 (2006.01); **B65H 63/06** (2006.01); **B65H 67/08** (2006.01); **B65H 69/06** (2006.01); **D01H 13/22** (2006.01)

CPC (source: EP)

B65H 51/22 (2013.01); **B65H 63/062** (2013.01); **B65H 67/081** (2013.01); **B65H 69/061** (2013.01); **D01H 13/22** (2013.01); **B65H 2701/31** (2013.01)

Citation (applicant)

JP 2010180007 A 20100819 - MURATA MACHINERY LTD

Citation (search report)

- [XA] DE 102012102695 A1 20131002 - RIETER AG MASCHF [CH]
- [XA] EP 2107025 A2 20091007 - MURATA MACHINERY LTD [JP]
- [AD] JP 2010180007 A 20100819 - MURATA MACHINERY LTD

Cited by

EP3438333A1

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 2966021 A1 20160113; CN 105253713 A 20160120; CN 105253713 B 20191022; EP 3072840 A1 20160928; EP 3072840 B1 20180321;
JP 2016016957 A 20160201

DOCDB simple family (application)

EP 15170253 A 20150602; CN 201510370004 A 20150629; EP 16166163 A 20150602; JP 2014142085 A 20140710