

Title (en)

YARN WINDING DEVICE AND YARN WINDING METHOD

Title (de)

GARNWICKELMASCHINE UND GARNWICKELVERFAHREN

Title (fr)

DISPOSITIF D'ENROULEMENT DE FIL ET PROCÉDÉ D'ENROULEMENT DE FIL

Publication

**EP 2687468 A1 20140122 (EN)**

Application

**EP 12760494 A 20120215**

Priority

- JP 2011061354 A 20110318
- JP 2012053447 W 20120215

Abstract (en)

In an arrangement in which a yarn unwound from a yarn supplying bobbin is temporarily stored in an unwound yarn storage and the yarn stored in the unwound yarn storage is wound to form a package, the time for yarn joining is secured without upsizing the unwound yarn storage. When the yarn is properly running (S202: NO, S203: YES), the yarn is unwound from the yarn supplying bobbin at a yarn unwinding speed  $V_c$  which is constant and maximum within a range of possible changes in the yarn unwinding speed. When the yarn storage amount is larger than  $A_1$  (S204: YES), the yarn winding speed is set at  $V_1$  ( $>V_c$ ) (S205), whereas, when the yarn storage amount is equal to or smaller than  $A_1$  (S204: NO), the yarn winding speed is set at  $V_2$  ( $<V_c$ ) (S206). When a yarn defect is detected (S202: YES) or the existence of the yarn Y becomes no longer detected (S203: NO), if the yarn storage amount is larger than  $A_2$  ( $<A_1$ ) (S207: YES), the yarn winding speed is maintained (S208), and if the yarn storage amount is equal to or smaller than  $A_2$  (S207: NO), the yarn winding speed is decreased to  $V_3$  ( $<V_1$  and  $V_2$ ) (S209).

IPC 8 full level

**B65H 54/22** (2006.01); **B65H 51/20** (2006.01); **B65H 51/22** (2006.01); **B65H 54/74** (2006.01); **B65H 61/00** (2006.01); **B65H 67/08** (2006.01)

CPC (source: EP)

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Cited by

EP3498641A1; CN104060350A; EP2962973A1

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

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**EP 2687468 A1 20140122**; **EP 2687468 A4 20140917**; **EP 2687468 B1 20170906**; CN 103443005 A 20131211; CN 103443005 B 20160413; JP 2012197135 A 20121018; JP 5884280 B2 20160315; WO 2012127939 A1 20120927

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