

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 B1 20170906 (EN)**

Application

**EP 12760494 A 20120215**

Priority

- JP 2011061354 A 20110318
- JP 2012053447 W 20120215

Abstract (en)

[origin: EP2687468A1] 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)

**B65H 51/22** (2013.01); **B65H 54/74** (2013.01); **B65H 61/00** (2013.01); **B65H 61/005** (2013.01); **B65H 67/081** (2013.01); **B65H 2701/31** (2013.01)

Cited by

EP3498641A1; CN104060350A; EP2962973A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

**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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