Title (en)
  Yarn winding device and yarn winding method

Title (de)
  Garnwickelmaschine und Garnwickelverfahren

Title (fr)
  Dispositif d'enroulement de fil et procédé d'enroulage de fil

Publication
  EP 2664572 A3 20140618 (EN)

Application
  EP 13165639 A 20130426

Priority
  JP 2012114442 A 20120518

Abstract (en)

  [origin: EP2664572A2] A winding unit (1) of an automatic winder includes a bobbin supporting section (3) adapted to support a yarn supplying bobbin (8) in a replaceable manner; a yarn accumulating device (22) adapted to wind a yarn (y) unwound from the yarn supplying bobbin (8) to accumulate the yarn; a package forming device (4) adapted to wind the yarn (y) unwound from the yarn accumulating device (22) to form a package (P) ; a yarn amount detecting section (12) adapted to detect an amount of yarn left on the yarn supplying bobbin (8); and a unit control section (5) adapted to predict an end of unwinding of the yarn (y) of the yarn supplying bobbin (8) based on a detection result of the yarn amount detecting section (12) and to decelerate a winding speed of the yarn accumulating device (22) prior to the end of unwinding of the yarn (y).

IPC 8 full level
  B65H 63/08 (2006.01)

CPC (source: EP)
  B65H 63/086 (2013.01); B65H 2701/31 (2013.01)

Citation (search report)
  • [XAI] EP 0311815 A2 19890419 - SCHLAFHORST & CO W [DE]
  • [X] US 4805846 A 19890221 - UEDA YUTAKA [JP], et al
  • [X] US 2226135 A 19401224 - NEWTON JR WILLIAM A, et al
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  • [X] JP H09151033 A 19970610 - BRIDGESTONE METALPHA CORP
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  FR3033322A1; EP2966021A1; CN105366428A; EP4292968A1; CN112299144A

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 2664572 A2 20131120; **EP 2664572 A3 20140618**; **EP 2664572 B1 20150722**; CN 103420226 A 20131204; CN 103420226 B 20171027; IN 1257DE2013 A 20150619; JP 2013241231 A 20131205

DOCDB simple family (application)
  EP 13165639 A 20130426; CN 201310098955 A 20130326; IN 1257DE2013 A 20130429; JP 2012114442 A 20120518