

Title (en)

Yarn winding apparatus, take-up winder using yarn winding apparatus, yarn winding method and taper end package

Title (de)

Garnwickelvorrichtung, Aufwickelvorrichtung, die die Garnwickelvorrichtung einsetzt, Garnwickelverfahren und Spule mit konischen Spulenenden

Title (fr)

Appareil d'enroulement de fil, renvideur de fil utilisant l'appareil d'enroulement de fil, procédé d'enroulement de fil et bobine à extrémités coniques

Publication

EP 2208700 A2 20100721 (EN)

Application

EP 10150513 A 20100112

Priority

JP 2009009058 A 20090119

Abstract (en)

The present invention provides a yarn winding apparatus configured to allow monofilaments to be cross-wound to form a taper end package. A yarn winding apparatus 1 includes bobbin holders 3 each configured to support a plurality of take-up tubes 2 around which respective plural supplied yarns Y are wound, a plurality of belt type traverse devices 5 each including a yarn guide 4 configured to be able to catch the corresponding yarn Y, the traverse device 5 reciprocating the yarn guide 4 to traverse the yarn Y with respect to the corresponding take-up tube 2, and a contact roller 11 provided between the set of the plurality of traverse devices 5 and the bobbin holders 3 and pressed against packages Q formed on the respective take-up tubes 2. Each of the belt type traverse devices 5 is configured to be able to change the reciprocation range of reciprocating motion of the yarn guide 4.

IPC 8 full level

B65H 54/28 (2006.01); **B65H 54/32** (2006.01); **B65H 55/04** (2006.01); **B65H 59/00** (2006.01)

CPC (source: EP KR)

B65H 54/02 (2013.01 - KR); **B65H 54/28** (2013.01 - KR); **B65H 54/2821** (2013.01 - EP); **B65H 54/2881** (2013.01 - EP);
B65H 54/32 (2013.01 - EP); **B65H 54/56** (2013.01 - KR); **B65H 55/04** (2013.01 - EP); **B65H 59/00** (2013.01 - EP); **B65H 2701/31** (2013.01 - EP)

Citation (applicant)

JP H0524740 A 19930202 - TORAY INDUSTRIES

Designated contracting state (EPC)

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 SE SI SK SM TR

DOCDB simple family (publication)

EP 2208700 A2 20100721; EP 2208700 A3 20121024; CN 101780902 A 20100721; CN 101780902 B 20121205; JP 2010163275 A 20100729;
JP 5281907 B2 20130904; KR 101329109 B1 20131114; KR 20100084967 A 20100728

DOCDB simple family (application)

EP 10150513 A 20100112; CN 201010003517 A 20100112; JP 2009009058 A 20090119; KR 20090121844 A 20091209