

Title (en)  
SPUN YARN WINDING SYSTEM

Title (de)  
WICKLUNGSSYSTEM FÜR GESPONNENES GARN

Title (fr)  
SYSTÈME D'ENROULEMENT DE FIL FILÉ

Publication  
**EP 3162748 B1 20190911 (EN)**

Application  
**EP 16196252 A 20161028**

Priority  
JP 2015213745 A 20151030

Abstract (en)  
[origin: EP3162748A1] In a spun yarn winding system, a yarn threading robot is less likely to interfere with an operator or an apparatus which collects packages. Take-up units 3 are lined up in the left-right direction. Each take-up unit 3 is configured to take up yarns Y spun out from a spinning apparatus and form packages by winding the yarns Y into bobbins B. A yarn threading robot 4 is provided above a winding unit 14 of the take-up unit 3, and hangs down from a guide rail 35 extending in the left-right direction over the take-up units 3 and moves in the left-right direction along the guide rail 35. At least when moving along the guide rail 35, the yarn threading robot 4 is positioned above the upper end of a fully-wound package P attached to a bobbin holder 24.

IPC 8 full level  
**B65H 54/88** (2006.01); **B65H 57/00** (2006.01); **B65H 67/048** (2006.01); **D01D 13/02** (2006.01)

CPC (source: CN EP)  
**B65H 54/88** (2013.01 - EP); **B65H 57/003** (2013.01 - EP); **B65H 67/048** (2013.01 - EP); **D01D 10/0481** (2013.01 - CN); **D01D 11/00** (2013.01 - CN); **B65H 2701/3132** (2013.01 - EP); **D01D 13/02** (2013.01 - EP)

Cited by  
WO2019001948A1; CN113584616A; CN111148863A; JP2019002091A; WO2019011548A1; TWI716691B; DE102017006137A1; DE102017006432A1; WO2019007645A1

Designated contracting state (EPC)  
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DOCDB simple family (publication)  
**EP 3162748 A1 20170503; EP 3162748 B1 20190911**; CN 106939441 A 20170711; CN 106939441 B 20210921; CN 111876836 A 20201103; CN 111876836 B 20230725; CN 113699605 A 20211126; CN 113699605 B 20240102; CN 113755959 A 20211207; CN 113755959 B 20230418; CN 113789577 A 20211214; CN 113789577 B 20230428; JP 2017082381 A 20170518; JP 2020125581 A 20200820; JP 6763744 B2 20200930; JP 6960501 B2 20211105; TW 201715105 A 20170501; TW I677604 B 20191121

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**EP 16196252 A 20161028**; CN 201610959353 A 20161028; CN 202010743220 A 20161028; CN 202111091263 A 20161028; CN 202111091396 A 20161028; CN 202111091407 A 20161028; JP 2016208544 A 20161025; JP 2020085366 A 20200514; TW 105135106 A 20161028