

Title (en)

Package discharging device and yarn winding machine

Title (de)

Verpackungsentladungsvorrichtung und Garnwickelmaschine

Title (fr)

Dispositif de décharge d'emballage et machine de bobinage de fil

Publication

**EP 2669229 A3 20141203 (EN)**

Application

**EP 13165532 A 20130426**

Priority

JP 2012124449 A 20120531

Abstract (en)

[origin: EP2669229A2] A package discharging device (100) discharges a package (30) having a winding tube held by a holding section. The package discharging device (100) includes a package contact section that comes into contact with an outer periphery (30a) of the package (30), a first moving section that moves the package contact section and brings the package contact section into contact with the outer periphery (30a) of the package (30), and a pressure adjusting section (140) that adjusts a pressing force applied to the package (30) when the package contact section is in contact with the outer periphery (30a) of the package (30).

IPC 8 full level

**B65H 67/04** (2006.01); **B65H 54/26** (2006.01)

CPC (source: EP)

**B65H 54/26** (2013.01); **B65H 67/0411** (2013.01); **B65H 2701/31** (2013.01)

Citation (search report)

- [XA] EP 2441720 A2 20120418 - MURATA MACHINERY LTD [JP]
- [A] US 4541577 A 19850917 - SUZUKI OSAMU [JP], et al
- [A] DE 102007036696 A1 20090205 - OERLIKON TEXTILE GMBH & CO KG [DE]

Cited by

EP3689803A4; WO2019008421A1

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 2669229 A2 20131204**; **EP 2669229 A3 20141203**; **EP 2669229 B1 20170104**; CN 103449259 A 20131218; CN 103449259 B 20170503; JP 2013249160 A 20131212

DOCDB simple family (application)

**EP 13165532 A 20130426**; CN 201310124416 A 20130411; JP 2012124449 A 20120531