

Title (en)  
YARN WINDER

Title (de)  
GARNWICKLER

Title (fr)  
ENROULEUR DE FILS

Publication  
**EP 3412611 A1 20181212 (EN)**

Application  
**EP 18175981 A 20180605**

Priority  
JP 2017111719 A 20170606

Abstract (en)  
Postural change of a contact roller is accurately controlled even when a fluid pressure cylinder is employed. A yarn winder includes: a base 20; a bobbin holder 24 which is cantilevered by the base 20 and extends in a horizontal direction, bobbins B on which yarns Y are wound, respectively, being attached to the bobbin holder along an axial direction of the bobbin holder 24; a contact roller 25 which extends in the front-rear direction and applies a contact pressure to packages P formed by winding the yarns Y onto the respective bobbins B; a roller supporting member 30 which supports the contact roller 25 to be rotatable; an air cylinder 41 which is configured to posturally change a rear end portion of the roller supporting member 30 at least in the up-down direction; and an intervention mechanism 42 which intervenes between the rear end portion of the roller supporting member 30 and the air cylinder 41 and is configured to increase a load acting on the air cylinder 41 as the air cylinder 41 increases an upward postural change amount of the rear end portion of the roller supporting member 30.

IPC 8 full level  
**B65H 54/42** (2006.01); **B65H 54/52** (2006.01); **B65H 54/547** (2006.01)

CPC (source: CN EP)  
**B65H 54/42** (2013.01 - EP); **B65H 54/52** (2013.01 - CN EP); **B65H 54/547** (2013.01 - EP); **B65H 2701/31** (2013.01 - CN EP)

Citation (applicant)  
• JP 3322235 B2 20020909  
• JP 2011255979 A 20111222 - TMT MACHINERY INC

Citation (search report)  
• [XA] US 5192032 A 19930309 - BROUWER CHARLES W [US], et al  
• [AD] JP 3322235 B2 20020909  
• [AD] EP 2392532 A2 20111207 - TMT MACHINERY INC [JP]  
• [A] JP H0346969 A 19910228 - MURATA MACHINERY LTD

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)  
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DOCDB simple family (publication)  
**EP 3412611 A1 20181212**; **EP 3412611 B1 20200715**; CN 108996317 A 20181214; CN 108996317 B 20220311; JP 2018203472 A 20181227; JP 6913518 B2 20210804

DOCDB simple family (application)  
**EP 18175981 A 20180605**; CN 201810472337 A 20180517; JP 2017111719 A 20170606