

Title (en)  
YARN WINDING MACHINE

Title (de)  
GARNWICKLUNGSMASCHINE

Title (fr)  
MACHINE D'ENROULEMENT DE FIL

Publication  
**EP 3453662 A1 20190313 (EN)**

Application  
**EP 18187840 A 20180807**

Priority  
JP 2017169758 A 20170904

Abstract (en)  
In a winder unit (10), a cradle (23) rotatably holds a package (30), an angle sensor (44) detects a rotation angle of the cradle (23), and an upper yarn suction port (35) is movable near and away from a surface of the package (30), and catches a yarn end of the package (30). A unit controlling section (50) moves the upper yarn suction port (35) to a position that is at a predetermined distance from the surface of the package (30) based on the rotation angle of the cradle (23) detected by the angle sensor (44) at the time of a lift-up.

IPC 8 full level  
**B65H 67/08** (2006.01)

CPC (source: CN EP)  
**B65H 54/28** (2013.01 - CN); **B65H 54/44** (2013.01 - CN); **B65H 54/553** (2013.01 - CN); **B65H 67/0411** (2013.01 - CN); **B65H 67/081** (2013.01 - CN); **B65H 67/085** (2013.01 - EP); **B65H 2701/31** (2013.01 - CN EP)

Citation (applicant)  
JP 2010013259 A 20100121 - MURATA MACHINERY LTD

Citation (search report)  
• [XYI] DE 3827345 A1 19900301 - STAHLECKER FRITZ [DE], et al  
• [XYI] EP 3081518 A1 20161019 - MURATA MACHINERY LTD [JP]  
• [X] DE 202007011864 U1 20071025 - OERLIKON TEXTILE GMBH & CO KG [DE]  
• [YD] JP 2010013259 A 20100121 - MURATA MACHINERY LTD  
• [Y] EP 1717183 A1 20061102 - RIETER CZ AS [CZ]

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 3453662 A1 20190313**; **EP 3453662 B1 20211222**; CN 109422136 A 20190305; CN 109422136 B 20211210; JP 2019043737 A 20190322

DOCDB simple family (application)  
**EP 18187840 A 20180807**; CN 201811009003 A 20180831; JP 2017169758 A 20170904