

Title (en)
YARN WINDING DEVICE

Title (de)
GARNWICKLUNGSVORRICHTUNG

Title (fr)
DISPOSITIF DE BOBINAGE DE FIL

Publication
EP 3312119 B1 20181024 (EN)

Application
EP 17190815 A 20170913

Priority
JP 2016204098 A 20161018

Abstract (en)
[origin: EP3312119A1] A winding unit (2) includes a braking device (53) that includes a braking shoe (75) that brakes a package (100), a chamber (76) that operates the braking shoe, and a changing section (71) that changes a pressure of fluid supplied to the chamber. The changing section includes a first valve (81) arranged between a supply port (84) and the chamber, a second valve (82) arranged between the chamber and an exhaust port (85), and a controlling section (83) that opens and closes the valves independently. The pressure can be increased, decreased, or maintained at a constant value by appropriately operating the first valve and the second valve. Accordingly, the pressure can be adjusted at a given time, and the magnitude of the braking force acting on the package can be changed at a given time.

IPC 8 full level
B65H 54/74 (2006.01); **B65H 54/42** (2006.01); **B65H 54/553** (2006.01)

CPC (source: CN EP)
B65H 54/02 (2013.01 - CN); **B65H 54/42** (2013.01 - CN EP); **B65H 54/48** (2013.01 - CN); **B65H 54/553** (2013.01 - EP);
B65H 54/74 (2013.01 - EP); **B65H 2403/7252** (2013.01 - CN); **B65H 2406/40** (2013.01 - CN); **B65H 2701/31** (2013.01 - EP)

Cited by
CN115215152A; EP3581807A1; EP3613688A1; US2020063762A1

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

DOCDB simple family (publication)
EP 3312119 A1 20180425; **EP 3312119 B1 20181024**; CN 107954259 A 20180424; CN 107954259 B 20210302; EP 3375743 A1 20180919;
JP 2018065637 A 20180426

DOCDB simple family (application)
EP 17190815 A 20170913; CN 201710917235 A 20170930; EP 18169799 A 20170913; JP 2016204098 A 20161018