

Title (en)

ANNULEAR DEVICE FOR SHAFTS IN WINDING MACHINES AND SHAFT EQUIPPED THEREWITH

Title (de)

RINGVORRICHTUNG FÜR WELLEN IN WICKELMASCHINEN UND DAMIT AUSGERÜSTETE WELLE

Title (fr)

DISPOSITIF ANNULAIRE POUR ARBRES DANS DES MACHINES D'ENROULEMENT ET ARBRE ÉQUIPÉ DE CELUI-CI

Publication

**EP 3553010 A1 20191016 (EN)**

Application

**EP 19168835 A 20190412**

Priority

IT 201800004487 A 20180413

Abstract (en)

An annular locking device (10) for the winding of reels is intended to be arranged alongside a plurality of similar annular devices so as to form a winding shaft in a winding machine. The device comprises an inner ring (11) and an outer ring (12) which are concentric and engaging elements (13) which emerge through slots (14) on the peripheral surface of the outer ring. The outer ring is rotatable relative to the inner ring between a first angular rest position, in which the engaging elements (13) may retract inside the outer ring by a first amount, and a second angular position, in which the engaging elements (13) may retract by a smaller amount than in the first angular rest position. The engaging elements (13) are in the form of cylinders with rounded bases. A shaft assembly with such devices is also described.

IPC 8 full level

**B65H 75/24** (2006.01)

CPC (source: EP US)

**B65H 75/247** (2013.01 - EP US)

Citation (applicant)

- US 2008237388 A1 20081002 - KLINKE ROBERT [US]
- JP 2012111628 A 20120614 - KATAOKA KIKAI SEISAKUSHO KK
- JP H11208942 A 19990803 - HAGIWARA KOGYO KK
- JP H1159981 A 19990302 - HAGIWARA KOGYO KK

Citation (search report)

- [AD] US 2008237388 A1 20081002 - KLINKE ROBERT [US]
- [AD] JP 2012111628 A 20120614 - KATAOKA KIKAI SEISAKUSHO KK
- [AD] JP H11208942 A 19990803 - HAGIWARA KOGYO KK
- [AD] JP H1159981 A 19990302 - HAGIWARA KOGYO KK

Designated contracting state (EPC)

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Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 3553010 A1 20191016; EP 3553010 B1 20201007; ES 2837674 T3 20210701; IT 201800004487 A1 20191013**

DOCDB simple family (application)

**EP 19168835 A 20190412; ES 19168835 T 20190412; IT 201800004487 A 20180413**