

Title (en)

ANNULAR DEVICE WITH IMPROVED PERFORMANCE FOR SHAFTS OF WINDING MACHINES

Title (de)

RINGFÖRMIGE VORRICHTUNG MIT VERBESSERTER LEISTUNG FÜR WELLEN VON WICKELMASCHINEN

Title (fr)

DISPOSITIF ANNULAIRE À PERFORMANCE AMÉLIORÉE POUR ARBRES DE MACHINES D'ENROULEMENT

Publication

**EP 3705432 A1 20200909 (EN)**

Application

**EP 20160871 A 20200304**

Priority

IT 201900003153 A 20190305

Abstract (en)

An annular locking device (10) for winding coils is intended to be arranged alongside a plurality of same annular devices in order to form a winding shaft in a winding machine. The device comprises a concentric inner ring (11) and outer ring (12) and engagement elements (13) which emerge through slots (14) on the peripheral surface of the outer ring. The outer ring can be rotated with respect to the inner ring between a first angular rest position, in which the engagement elements (13) can be retracted into the outer ring by a first amount, and a second angular position, in which the engagement elements (13) can be retracted by an amount less than in the first angular rest position. A row of rolling elements is arranged between inner ring and outer ring. 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 (search report)

- [XAI] JP 2017114597 A 20170629 - KATAOKA KIKAI SEISAKUSHO KK
- [XI] JP H0213545 A 19900117 - KAWASAKI MASARU
- [X] JP 2001106397 A 20010417 - KATAOKA KIKAI SEISAKUSHO KK

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 3705432 A1 20200909; EP 3705432 B1 20230607**

DOCDB simple family (application)

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