

Title (en)

DEVICE FOR GRIPPING WINDING TUBES, ESPECIALLY WINDING TUBES SUPPORTING PAPER WEBS OR THE LIKE

Publication

**EP 0208832 B1 19880810 (DE)**

Application

**EP 86103137 A 19860308**

Priority

- DE 3521582 A 19850615
- DE 8517584 U 19850615

Abstract (en)

[origin: US4730779A] An expanding mandrel for clamping a tubular member, especially a tubular core on which a paper web can be coiled in a machine for coiling the web or for supplying the web from a coil, has a pin with flat surfaces against which bracing elements support angularly equispaced segments in a cage which are pressed outwardly to urge convex surfaces of the segments against the inner surface of the core. Along longitudinal edges of the segments rounded rises or protuberances are provided which prevent stress peaks tending to damage the core.

IPC 1-7

**B65H 16/02**

IPC 8 full level

**B65H 16/04** (2006.01); **B65H 18/04** (2006.01); **B65H 75/24** (2006.01)

CPC (source: EP US)

**B65H 16/04** (2013.01 - EP US); **B65H 18/04** (2013.01 - EP US); **B65H 75/246** (2013.01 - EP US); **B65H 2301/41346** (2013.01 - EP US); **B65H 2405/45** (2013.01 - EP US); **Y10T 279/1041** (2015.01 - EP US); **Y10T 279/1083** (2015.01 - EP US)

Cited by

CN110759174A; DE4122806A1; DE3829704A1; US5123605A

Designated contracting state (EPC)

AT CH FR GB IT LI NL SE

DOCDB simple family (publication)

**US 4730779 A 19880315**; CA 1271178 A 19900703; EP 0208832 A1 19870121; EP 0208832 B1 19880810; ES 296715 U 19871216; ES 296715 Y 19880516; FI 81320 B 19900629; FI 81320 C 19901010; FI 861528 A0 19860410; FI 861528 A 19861216; JP H078695 B2 19950201; JP S61291351 A 19861222

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**US 87428386 A 19860613**; CA 511120 A 19860609; EP 86103137 A 19860308; ES 296715 U 19860610; FI 861528 A 19860410; JP 13636486 A 19860613