

Title (en)

Unwinding assisting device and automatic winder comprising the same

Title (de)

Abspulhilfsvorrichtung und automatischer Wickler damit

Title (fr)

Dispositif d'assistance de déroulement et enrouleur automatique le comportant

Publication

**EP 2072440 A3 20100616 (EN)**

Application

**EP 08020035 A 20081117**

Priority

JP 2007328507 A 20071220

Abstract (en)

[origin: EP2072440A2] An unwinding assisting device (12) includes a regulating member (40) that regulates a balloon generated when a yarn is unwound from a yarn supplying bobbin (21), and an elevating and lowering means for elevating and lowering the regulating means (40). The elevating and lowering means comprises a stepping motor (41) and a belt member (42) that transmits driving of the stepping motor (41). The belt member (42) is a toothed belt (Fig.2).

IPC 8 full level

**B65H 57/12** (2006.01); **B65H 57/22** (2006.01); **B65H 57/26** (2006.01)

CPC (source: EP)

**B65H 57/12** (2013.01); **B65H 57/22** (2013.01); **B65H 57/26** (2013.01); **B65H 2701/31** (2013.01)

Citation (search report)

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- [YA] JP H08198520 A 19960806 - MURATA MACHINERY LTD
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Cited by

EP2687469A3; EP2998257A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

**EP 2072440 A2 20090624**; **EP 2072440 A3 20100616**; **EP 2072440 B1 20170412**; CN 101462659 A 20090624; CN 101462659 B 20121003; JP 2009149404 A 20090709

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