

Title (en)
Kink preventing device and automatic winder comprising the same

Title (de)
Knickverhinderungsvorrichtung und automatischer Wickler damit

Title (fr)
Dispositif anti-tortillement et enrouleur automatique le comportant

Publication
EP 2078691 A3 20091209 (EN)

Application
EP 08020337 A 20081121

Priority
JP 2008002027 A 20080109

Abstract (en)
[origin: EP2078691A2] A kink preventing device (17) includes a contact portion (80) that can contact with the yarn supplying bobbin (21) and a stepping motor (41) that moves the contact portion (80). Furthermore, the kink preventing device (17) includes a pivotally moving portion (43) attached to a shaft portion (44) of the stepping motor (41), and a spring portion (42) provided between the pivotally moving portion (43) and the contact portion (80). The pivotally moving portion (43) rotates integrally with the output shaft (44), to which rotation of the stepping motor (41) is transmitted. The contact portion (80) is pivotally movably attached to the shaft portion (44). The stepping motor (41) pivotally moves the pivotally moving portion (43) to allow the contact portion (80) to be pivotally moved by a biasing force of the spring portion (42).

IPC 8 full level
B65H 59/06 (2006.01); **B65H 63/08** (2006.01)

CPC (source: EP)
B65H 59/06 (2013.01); **B65H 63/088** (2013.01); **B65H 2701/31** (2013.01)

Citation (search report)

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- [X] JP H03127665 U 19911224
- [XD] JP H1149433 A 19990223 - MURATA MACHINERY LTD
- [X] US 5377923 A 19950103 - MATSUI ISAMU [JP], et al
- [X] US 5024392 A 19910618 - UCHIDA HIROSHI [JP], et al
- [A] JP H0158573 U 19890412

Cited by
EP2096070A3; EP3572364A1; IT201800005658A1

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 2078691 A2 20090715; EP 2078691 A3 20091209; EP 2078691 B1 20110706; CN 101481056 A 20090715; CN 101481056 B 20120822; JP 2009161327 A 20090723

DOCDB simple family (application)
EP 08020337 A 20081121; CN 200810183829 A 20081209; JP 2008002027 A 20080109