

Title (en)

Slack preventing device for wire rod wound around spool, and slack preventing method therefore

Title (de)

Lockerungsvermeidungsvorrichtung für um eine Spule gewickelten Walzdraht, und Lockerungsvermeidungsverfahren dafür

Title (fr)

Dispositif de prévention de mou pour tige de fil métallique enroulé autour d'une bobine et procédé de prévention de mou

Publication

**EP 2612834 A2 20130710 (EN)**

Application

**EP 12007687 A 20121113**

Priority

JP 2012000309 A 20120105

Abstract (en)

The invention prevents a slack of a wire rod in a spool by preventing the wire rod fed by rotation of the spool from returning to the spool. A wire rod slack preventing device (20) is installed parallel to a wire rod feeding machine (10) feeding a wire rod (11) by rotating a spool (12), around which the wire rod (11) is wound, and has a reverse rotation roller (26) having a rotating axis which is parallel to a rotating axis of the spool and rotating in a reverse direction to a rotating direction of the spool while being in contact with the spool, a forward rotation roller (27) having a rotating axis which is parallel to the rotating axis of the reverse rotation roller (26) and rotating in the same direction as the spool while being in contact with the reverse rotation roller (26), and a pinching roller (28) having a rotating axis which is parallel to the rotating axis of the forward rotation roller (27) and pinching the wire rod, which is fed out of the spool, together with the forward rotation roller (27). Further, a wire rod slack preventing method draws the wire rod which is fed out due to the rotation of the spool, while pinching the wire rod by the forward rotation roller (27), which rotates with the rotation of the spool, together with the pinching roller (28).

IPC 8 full level

**B65H 49/24** (2006.01); **B65H 51/10** (2006.01); **B65H 51/20** (2006.01); **B65H 51/30** (2006.01); **B65H 54/10** (2006.01); **H01F 41/06** (2006.01)

CPC (source: EP KR)

**B65H 49/24** (2013.01 - EP); **B65H 51/10** (2013.01 - EP); **B65H 51/20** (2013.01 - EP); **B65H 51/30** (2013.01 - EP); **B65H 54/10** (2013.01 - EP); **B65H 59/00** (2013.01 - KR); **B65H 59/38** (2013.01 - KR); **H01F 41/096** (2016.01 - EP); **B65H 2701/37** (2013.01 - EP)

Citation (applicant)

JP H03159541 A 19910709 - TOSHIBA CORP

Cited by

CN104085728A; CZ307263B6; CN108529330A; CN105668310A; CN113334770A; CN116692586A; CN109264476A

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 2612834 A2 20130710**; **EP 2612834 A3 20140917**; **EP 2612834 B1 20180801**; CN 103193106 A 20130710; CN 103193106 B 20150513; JP 2013139320 A 20130718; JP 5797116 B2 20151021; KR 101361573 B1 20140212; KR 20130080759 A 20130715

DOCDB simple family (application)

**EP 12007687 A 20121113**; CN 201210505859 A 20121130; JP 2012000309 A 20120105; KR 20120139374 A 20121204