

Title (en)

Tension device and tension applying method

Title (de)

Spannungsvorrichtung und Spannungsanwendungsverfahren

Title (fr)

Dispositif de tension et procédé d'application de tension

Publication

EP 2617670 A3 20140917 (EN)

Application

EP 12007765 A 20121116

Priority

JP 2012009528 A 20120120

Abstract (en)

[origin: EP2617670A2] A tension device and a tension applying method are provided that can absorb fluctuation in the speed of a wire rod and keep constant the tension of the wire rod sent to a winding machine even when the speed of the wire rod markedly fluctuates. A tension device 20 includes a feeding pulley 24 around which a wire rod 11 fed from a wire rod supply source 12 is wound, feeding speed controlling means 26 for controlling the rotation of the feeding pulley 24 and controlling the speed of the wire rod 11 pulled out from the supply source 12 to move toward a winding machine 10, a movable first tension pulley 27 configured to turn the wire rod 11 fed from the feeding pulley 24, a movable second tension pulley 28 configured to further turn the wire rod 11 turned by the first tension pulley 27 and direct the wire rod 11 to the winding machine 10, and urging means 33, 34 for urging the first tension pulley 27 and the second tension pulley 28 to expand a space between these tension pulleys. A pair of tension arms 31, 32 is provided rotatably about proximal ends thereof. The tension pulleys are pivotally supported at the distal ends of the tension arms.

IPC 8 full level

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CPC (source: EP KR)

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Citation (search report)

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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)

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EP 2617670 A2 20130724; **EP 2617670 A3 20140917**; **EP 2617670 B1 20190327**; CN 103213873 A 20130724; CN 103213873 B 20160420; JP 2013147326 A 20130801; JP 5894444 B2 20160330; KR 101433706 B1 20140825; KR 20130085927 A 20130730

DOCDB simple family (application)

EP 12007765 A 20121116; CN 201210586405 A 20121228; JP 2012009528 A 20120120; KR 20120141564 A 20121207