

Title (en)

Spring coiling machine with adjustable cutting device

Title (de)

Federwindemaschine mit einstellbarer Schnitteinrichtung

Title (fr)

Enrouleuse de ressorts avec dispositif de coupe réglable

Publication

EP 2826572 B1 20190911 (DE)

Application

EP 14164046 A 20140409

Priority

DE 102013207028 A 20130418

Abstract (en)

[origin: CN104107870A] The invention refers to a spring winding machine with an adjustable cutting device. A spring winding machine that manufactures helical springs (200) by spring winding includes a feed device that feeds wire (115) to a shaping device (120), wherein the shaping device has a winding tool (122,124) and a pitch die (130); a cutting device that separates a finished helical spring from the wire after termination of shaping, wherein the cutting device (152) has a cutting tool which, by a drive system, can be moved along a predefinable closed trajectory; a control device that controls the feed device, the shaping device and the cutting device on the basis of an NC control program; and a programmable trajectory-setting system that sets the shape and/or position of the trajectory to be passed through by the cutting tool, wherein a trajectory which is mirror-symmetrical with respect to a plane of symmetry and has a predefinable ratio of height to width.

IPC 8 full level

B21F 3/02 (2006.01); **B21F 11/00** (2006.01); **B21F 35/00** (2006.01)

CPC (source: EP US)

B21F 3/02 (2013.01 - EP US); **B21F 3/06** (2013.01 - US); **B21F 11/005** (2013.01 - EP US); **B21F 35/00** (2013.01 - EP US)

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

DOCDB simple family (publication)

DE 102013207028 B3 20140626; BR 102014009461 A2 20150106; CN 104107870 A 20141022; CN 104107870 B 20170922; EP 2826572 A1 20150121; EP 2826572 B1 20190911; US 2014311204 A1 20141023

DOCDB simple family (application)

DE 102013207028 A 20130418; BR 102014009461 A 20140417; CN 201410156698 A 20140418; EP 14164046 A 20140409; US 201414251898 A 20140414