Title (en)

Rotor equipped machine for wire straightening and cutting.

Title (de)

Drahtricht- und -trennmaschine mit einem Rotor.

Title (fr)

Machine équipée d'un rotor pour redresser et couper des fils.

Publication

EP 0459934 A2 19911204 (EN)

Application

EP 91600005 A 19910228

Priority

GR 90100265 A 19900405

Abstract (en)

Rotor-equipped machine for Wire Straightening and cutting, which is composed out of a single or many units for the straightening and cutting of a single or many Wires simultaneously. Each unit consists of a Straightening System, which includes the Straightening Rotor (3) and the Mechanism (48-51) for the reciprocating motion of the Wire (1) inside the Rotor, a Cutting System (5), which includes the Double-Position Cutter (12), a two-channel Receptor (9), a System for the automatic control of the length to be cut and a free space for temporary storing of the Wire (1) between the Straightening (3) and Cutting System (5). The method for the reciprocation of the Wire (1) inside,, the Rotor is used to avoid the rapture of the Wire (1) if for some reason it is immoblized inside the body of the Rotor (3). The Wire (1) exiting the Rotor (3) may be stored, forming under the action of its weight a "storing curve" in the empty space between the Rotor (3) and the Cutting Mechanisms (5). That way any interruption, for any reason, of the progression of the Wire (1) through the Rotor (3), during the Cutting action and its excess stress inside the Rotor (3) is avoided. There is a double-action Cutting Blade (12) in the Cutting Mechanism (5), able to collaborate with the two-channel Receptor (25,26). The Wire enters one channel of the Receptor (25,26). The Cutting Blade (12) moves toward one direction, followed by the Receptor (25,26), cuts the Wire (1) and at the same time, the channel of the Receptor (25,26) opens at its lowest side, releasing the Wire being cut into the Storage Place (16,17). At the time of the Release, new Wire (1) to be cut enters the other channel of the Receptor (25,26) and it is cut and released during the motion of the Cutting Blade (12) towards the opposite direction. If the machine is composed out of many Straightening (3) and Cutting (5) units, it is possible for each unit to elaborate Wire (1) of different material, properties and diameter and to cut at different length size that of the other units. The desired length to be cut is remotely controlled and programmed from a control panel, by means of an automatic control Mechanism. <IMAGE>

IPC 1-7

B21F 1/02; B21F 11/00

IPC 8 full level

B21F 1/02 (2006.01); **B21F 11/00** (2006.01)

CPC (source: EP)

B21F 1/026 (2013.01); **B21F 11/00** (2013.01)

Cited by

CN107855443A; CN107716805A; CN106938307A; CN105382553A; CN105522079A; CN109382465A; CN115415439A; CN112743009A; CN118143161A; CN104259239A; CN114130922A; CN112427575A; CN112517803A; FR2764218A1; CN117300005A; US10166664B2; US10926315B2

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