

Title (en)

METHOD AND SYSTEM OF PRODUCTION OF SPRINGS FROM WIRE OF CIRCULAR OR OTHER CROSS-SECTIONAL AREA

Title (de)

VERFAHREN UND SYSTEM ZUR HERSTELLUNG VON FEDERN AUS DRAHT MIT KREISFÖRMIGER ODER ANDERER QUERSCHNITTSFLÄCHE

Title (fr)

SYSTEME ET PROCEDE DE PRODUCTION DE RESSORTS A PARTIR D'UN FIL A SECTION TRANSVERSALE DE FORME CIRCULAIRE OU AUTRE

Publication

**EP 1689541 B1 20071212 (EN)**

Application

**EP 04769060 A 20041001**

Priority

- GR 2004000047 W 20041001
- GR 20030100404 A 20031002

Abstract (en)

[origin: US2008245122A1] Method of production of springs made of wire of circular or other type crosssectional area, that are produced after having formed first springs ( 6 ) of constant diameter smaller or equal to that of the final spring ( 7 ) and of constant pitch smaller or equal to the smallest pitch of the final spring ( 7 ), where by compressing in a controlled fashion the spring turn of the initial spring ( 6 ) from the interior direction towards the outer one and from the lower sides towards the spiral direction the selected pitch and the diameter of the final spring ( 7 ) are formed. The invention also relates to a system that is comprised of a main roller ( 1 ) with motion rollers ( 2 ), ( 3 ), ( 4 ) that are contacting it peripherally and a pin ( 5 ) in an elbow ( 12 ) that is connected to an axle ( 10 ) situated upon a base ( 11 ) that is capable of moving along its longitudinal axis and to revolve around it, transmitting through the elbow ( 12 ) the motion to the pin ( 5 ) so as to form the diameter and the pitch of the final spring ( 7 ).

IPC 8 full level

**B21F 3/10** (2006.01); **B21F 3/02** (2006.01)

CPC (source: EP US)

**B21F 3/02** (2013.01 - EP US); **B21F 3/04** (2013.01 - EP US); **B21F 3/10** (2013.01 - EP US)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

**US 2008245122 A1 20081009**; AT E380613 T1 20071215; BR PI0414949 A 20070327; CN 100408222 C 20080806; CN 1863618 A 20061115; DE 602004010715 D1 20080124; EA 008178 B1 20070427; EA 200600569 A1 20060825; EP 1689541 A1 20060816; EP 1689541 B1 20071212; GR 1006845 B 20100705; GR 20030100404 A 20050615; JP 2007507357 A 20070329; WO 2005030411 A1 20050407

DOCDB simple family (application)

**US 57436004 A 20041001**; AT 04769060 T 20041001; BR PI0414949 A 20041001; CN 200480028702 A 20041001; DE 602004010715 T 20041001; EA 200600569 A 20041001; EP 04769060 A 20041001; GR 20030100404 A 20031002; GR 2004000047 W 20041001; JP 2006530609 A 20041001