

Title (en)

AN APPARATUS FOR DEFORMING A METAL BAR UP TO OBTAINING A SPIRAL

Title (de)

VORRICHTUNG ZUM VERFORMEN EINES METALLSTABS BIS ZUR GEWINNUNG EINER SPIRALE

Title (fr)

APPAREIL SERVANT À DÉFORMER UNE BARRE MÉTALLIQUE JUSQU'À L'OBTENTION D'UNE SPIRALE

Publication

EP 3147042 A1 20170329 (EN)

Application

EP 16190851 A 20160927

Priority

IT UB20153974 A 20150928

Abstract (en)

An apparatus (10) for deforming a metal bar (7) up to obtaining a spiral (3), comprising: a guide housing (8) for the metal bar (7), fixed to the frame; a deforming shaft (1); a first rotating member (41) which comprises a first gripping surface (51) of the metal bar (7); a second rotating member (42) which comprises a second gripping surface (52) of the metal bar (7); a fourth abutting surface (34) which projects from the lateral surface of the deforming shaft (1); a fifth abutting surface (35) which is facing the fourth abutting surface (34); a sixth abutting surface (36) which projects from the lateral surface of the deforming shaft (1), which is orientated in an opposite direction to the fourth abutting surface (34), which is distanced from the fourth abutting surface (34) by a distance that is substantially equal to a pitch of the spiral (3) to be obtained by the deformation of the metal bar (7). The apparatus (10) is configured in such a way as to carry out a plurality of operating cycles, each comprising: the gripping of the metal bar (7), actuating the first rotating member (41) and the second rotating member (42) in a first rotation direction (G) up to reaching a second angular position (E2), disengagement of the first rotating member (41) and the second rotating member (42), actuating the first rotating member (41) and the second rotating member (42) in a second rotation direction, opposite the first, up to the first angular position (E1); together with the abutting action exerted by the guide housing (8), the deforming shaft (1), the fourth abutting surface (34), the fifth abutting surface (35) and the sixth abutting surface (36); determining the deformation of the metal bar (7) up to obtaining a spiral (3).

IPC 8 full level

B21D 11/06 (2006.01)

CPC (source: EP)

B21D 11/06 (2013.01)

Citation (search report)

- [A] US 2011048092 A1 20110303 - SAIGO TAKESHI [JP], et al
- [A] WO 2009069723 A2 20090604 - TOYOTA MOTOR CO LTD [JP], et al

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 3147042 A1 20170329; IT UB20153974 A1 20170328

DOCDB simple family (application)

EP 16190851 A 20160927; IT UB20153974 A 20150928