

Title (en)

Cold rolling apparatus for an annular element, in particular a ring of a rolling bearing, and associated method.

Title (de)

Kaltwalzvorrichtung für ein ringförmiges Element, insbesondere ein Ring eines Wälzlagers, und zugehöriges Verfahren

Title (fr)

Appareil de laminage à froid d'un élément annulaire, en particulier une bague de roulement, et procédé associé

Publication

EP 2889093 A1 20150701 (EN)

Application

EP 14195153 A 20141127

Priority

IT TO20130979 A 20131129

Abstract (en)

Apparatus (1) and method for forming by rolling annular elements (2), such as rings of rolling bearings, from an annular blank workpiece (3); wherein the annular blank workpiece is sandwiched between a mandrel (4) which is axially symmetric with respect to a first axis and a forming tool (5) which is axially symmetric with respect to a second axis, arranged parallel to the first axis, which are rotating about the first and second axis; axial locking shoulders (15) are impressed on the annular blank workpiece (3) by means of a plurality of projections (14) carried by a first lateral surface (13) of the forming tool (5) which are coaxial with the second axis and are arranged mutually side by side and spaced apart in axial direction.

IPC 8 full level

B21H 1/12 (2006.01); **B21H 1/06** (2006.01); **B21H 7/18** (2006.01)

CPC (source: EP)

B21H 1/12 (2013.01); **B21H 1/06** (2013.01); **B21H 7/182** (2013.01)

Citation (applicant)

- EP 1385651 A1 20040204 - SKF IND SPA [IT]
- WO 9832556 A1 19980730 - UNIV DRESDEN TECH [DE], et al

Citation (search report)

- [XA] WO 9832556 A1 19980730 - UNIV DRESDEN TECH [DE], et al
- [XA] EP 2644297 A1 20131002 - SKF AB [SE]
- [XA] US 3803890 A 19740416 - CONNELL G

Cited by

CN105396991A; CN105562567A; CN107971437A; CN111420992A; CN105215239A; CN113084053A

Designated contracting state (EPC)

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Designated extension state (EPC)

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