

Title (en)

Process and machine for forging rod-shaped article having deformed portion at an end thereof

Title (de)

Verfahren und Maschine zum Schmieden eines Gegenstandes mit einem deformierten Endteil

Title (fr)

Procédé et machine pour forger un article en forme de barre ayant une extrémité déformée

Publication

**EP 0850711 B1 20010523 (EN)**

Application

**EP 97122837 A 19971223**

Priority

JP 35604696 A 19961224

Abstract (en)

[origin: EP0850711A1] In a forging process according to the present invention, a full enclosed die forging step, a finish forging step, and a deburring step are performed successively. In the full enclosed die forging step, a preformed rod-shaped log (51A) is pressed from the direction perpendicular to the axial direction of the log (51A) with a first upper die half (31) and a first lower die half (21). The log (51A) is pressed by punches (44) from the axial direction thereof for the rough forging. As a result, a formed log (51A) is obtained that has a concave portion at least at one end thereof. In the finish forging step, the formed log (51A) is pressed from the direction perpendicular to the axial direction of the formed log (51A) with an upper die half and a lower die half for the deburring. In this way, the formed log having a burr is obtained. In a deburring step, the formed log having the burr is deburred. <IMAGE>

IPC 1-7

**B21K 1/76**

IPC 8 full level

**B21J 5/02** (2006.01); **B21K 1/12** (2006.01); **B21K 1/76** (2006.01)

CPC (source: EP KR)

**B21J 5/02** (2013.01 - KR); **B21J 5/12** (2013.01 - KR); **B21J 9/18** (2013.01 - EP KR); **B21K 1/766** (2013.01 - EP KR)

Cited by

CN107855447A; CN103287232A; CN117000940A; US6742253B2; WO03004197A1; WO2011081676A1; WO2023031767A1

Designated contracting state (EPC)

DE GB IT

DOCDB simple family (publication)

**EP 0850711 A1 19980701**; **EP 0850711 B1 20010523**; DE 69704928 D1 20010628; DE 69704928 T2 20010913; JP 3507264 B2 20040315; JP H10180394 A 19980707; KR 19980064567 A 19981007

DOCDB simple family (application)

**EP 97122837 A 19971223**; DE 69704928 T 19971223; JP 35604696 A 19961224; KR 19970073125 A 19971224