Title (en)

SWAGING METHOD AND SWAGING APPARATUS

Title (de

TIÉFZIEHVERFAHREN UND TIEFZIEHVORRICHTUNG

Title (fr)

PROCÉDÉ DE RÉTREINTE ET APPAREIL DE RÉTREINTE

Publication

EP 1914029 A1 20080423 (EN)

Application

EP 06782131 A 20060802

Priority

- JP 2006315262 W 20060802
- JP 2005224969 A 20050803
- US 70678305 P 20050810

Abstract (en

An upsetting method high in productivity of an upsetting manufactured product is provided. An extruder 11 and a closed-die 20 divided into two pieces are prepared. The divided members 21 and 21 of the closed-die are combined with each other so that the tip end portion of an extrusion nozzle 13 is arranged in a cavity 25 of the closed-die 20 with the extruded raw material 1 extruded from the extrusion opening 15 of the extrusion nozzle 13 of the extruder 11. With this, the closed-die 20 is formed, and the extruded raw material 1 is clamped by and between clamping portions 22 and 22 provided at both the divided members 21 and 21. Subsequently, while extruding the extruded raw material 1 from the extrusion opening 15 of the extrusion nozzle 13 by the extruder 11, both the divided members 21 and 21 are moved in the forward direction with respect to the extrusion direction of the extruded raw material 1 at a speed slower than the extrusion speed in a state in which the extruded raw material 1 is clamped by and between the clamping portions 22 and 22 of both the divided members 21 and 21. Thereby, the exposed portion 2 of the extruded raw material 1 exposed between the extrusion opening 15 of the extrusion nozzle 13 and the clamping portions 22 of both the divided members 21 and 21 is expanded in diameter in the cavity 25.

IPC 8 full level

B21J 5/08 (2006.01); B21C 23/14 (2006.01)

CPC (source: EP)

B21C 23/14 (2013.01); B21C 25/08 (2013.01); B21C 35/02 (2013.01); B21C 35/023 (2013.01); B21J 5/08 (2013.01)

Designated contracting state (EPC)

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

DOCDB simple family (publication)

EP 1914029 A1 20080423; EP 1914029 A4 20100505; CN 101237949 A 20080806; CN 101237949 B 20100421; WO 2007015497 A1 20070208

DOCDB simple family (application)

EP 06782131 A 20060802; CN 200680028730 A 20060802; JP 2006315262 W 20060802