

Title (en)

METHOD FOR MANUFACTURING OUTER PARTS OF CONSTANT VELOCITY JOINTS

Title (de)

VERFAHREN ZUR HERSTELLUNG VON AUSSENHÜLSEN FÜR HOMOKINETISCHE GELENKE

Title (fr)

PROCEDE DE FABRICATION DE PIECES FEMELLES POUR JOINTS HOMOCINETIQUES

Publication

**EP 0927086 B1 20000223 (EN)**

Application

**EP 97909228 A 19970902**

Priority

- DE 19637839 A 19960917
- EP 9704769 W 19970902

Abstract (en)

[origin: DE19637839C1] In a method for manufacturing outer parts of constant velocity joints by plastic deformation of a preform (3) having a cavity open on one side to produce axial non-undercut ball tracks (6) and cage guide surfaces (7), wherein the preform (3) is received in an outer tool (2) and the inner tool (1) plastically forms inner wall regions to ball tracks (6) and cage guide surfaces (7) with the application of pressure, the inner tool (1) comprises a one-piece wobble pressing die having segments of different convex curvature which is first of all plunged centrally into the cavity in the preform (3), after which the desired final contours of the ball tracks (6) and cage guide surfaces (7) are produced using multiple wobbling movements with a corresponding orbital angle alpha .

IPC 1-7

**B21K 1/76; B21J 9/02**

IPC 8 full level

**B21J 9/02** (2006.01); **B21K 1/14** (2006.01); **B21K 1/76** (2006.01)

CPC (source: EP)

**B21J 9/025** (2013.01); **B21K 1/762** (2013.01); **B21K 1/765** (2013.01)

Designated contracting state (EPC)

DE ES FR GB

DOCDB simple family (publication)

**DE 19637839 C1 19971030**; DE 69701331 D1 20000330; DE 69701331 T2 20000921; EP 0927086 A1 19990707; EP 0927086 B1 20000223; ES 2145586 T3 20000701; JP 2001507992 A 20010619; WO 9812006 A1 19980326

DOCDB simple family (application)

**DE 19637839 A 19960917**; DE 69701331 T 19970902; EP 9704769 W 19970902; EP 97909228 A 19970902; ES 97909228 T 19970902; JP 51403798 A 19970902