

Title (en)

METHOD FOR PRODUCING A LOW-FRICTION BALL JOINT AND A BALL JOINT PRODUCED ACCORDING TO THIS METHOD

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES REIBUNGSARMEN KUGELGELENKES UND EIN NACH DIESEM VERFAHREN HERGESTELLTES KUGELGELENK

Title (fr)

PROCEDE DE PRODUCTION D'UN JOINT A ROTULE A FAIBLES FROTTEMENTS ET JOINT A ROTULE OBTENU D'APRES CE PROCEDE

Publication

**EP 1129299 A1 20010905 (DE)**

Application

**EP 00963973 A 20000907**

Priority

- DE 0003091 W 20000907
- DE 19943194 A 19990909

Abstract (en)

[origin: WO0118412A1] The invention relates to a method for producing a low-friction ball joint. According to said method, a ball pin (1) with a pin area (1.1) and a joint ball (1.1) which is moulded thereto is introduced into a bearing shell (2, 2.1, 2.2) and this is then introduced into a housing through an opening (4). After the parts have been inserted, the opening (4) of the housing (3) is closed with a housing lid (5). The pin area of the ball pin is introduced into the receiving device of a torque measuring device in order to determine the moment of articulation between the bearing shells (2.1, 2.2) and the joint ball (1.2). The housing lid (5) of the housing (3) is then permanently fixed using a rolling device (10), by moving a housing rolling edge (9) which is located on the housing (3). The moment of articulation is continuously measured during the rolling process and compared with a desired value that can be pre-set. The housing lid (5) pushes the upper bearing shell (2.2) in an axial direction against the joint ball (1.2) and generates a pressure that is partially compensated by a support element (6) on the housing lid (5). The rolling process ends as soon as the desired value for the moment of articulation is reached.

IPC 1-7

**F16C 11/06**

IPC 8 full level

**B21D 53/10** (2006.01); **F16C 11/06** (2006.01)

CPC (source: EP US)

**F16C 11/0633** (2013.01 - EP US); **F16C 11/0642** (2013.01 - EP US); **F16C 11/0647** (2013.01 - EP US); **Y10T 29/497** (2015.01 - EP US); **Y10T 29/49918** (2015.01 - EP US); **Y10T 403/1608** (2015.01 - EP US); **Y10T 403/20** (2015.01 - EP US); **Y10T 403/32631** (2015.01 - EP US)

Citation (search report)

See references of WO 0118412A1

Designated contracting state (EPC)

ES FR GB IT SE

DOCDB simple family (publication)

**WO 0118412 A1 20010315**; DE 19943194 A1 20010405; DE 19943194 C2 20010712; EP 1129299 A1 20010905; JP 2003508702 A 20030304; US 6592284 B1 20030715

DOCDB simple family (application)

**DE 0003091 W 20000907**; DE 19943194 A 19990909; EP 00963973 A 20000907; JP 2001521915 A 20000907; US 83170401 A 20010718