

Title (en)

METHOD FOR PRODUCING A TOOTHED GEAR

Title (de)

VERFAHREN ZUM HERSTELLEN EINES ZAHNRADES

Title (fr)

PROCEDE DE FABRICATION D'UNE ROUE DENTEE

Publication

EP 1694452 A1 20060830 (DE)

Application

EP 04802001 A 20041213

Priority

- AT 2004000436 W 20041213
- AT 20542003 A 20031219

Abstract (en)

[origin: WO2005058524A1] The invention relates to a method for producing a toothed gear from a powder metal blank (2) that is compacted and sintered with an overmeasure in the toothed area. According to said method, the powder metal blank (2) is supported on a mandrel (1) and is compacted in the area of overmeasure by pressing a counter-toothed section of a rotating pressing tool (4) that engages with the toothed section of the powder metal blank (2), thereby plastically deforming the piece by the overmeasure. The inventive method is characterized in that the powder metal blank is radially clamped across the periphery on both ends during compaction, thereby allowing for a precise production.

IPC 8 full level

B21H 5/02 (2006.01)

CPC (source: EP US)

B21H 5/022 (2013.01 - EP US); **Y10T 29/49471** (2015.01 - EP US)

Citation (search report)

See references of WO 2005058524A1

Cited by

DE102014002219A1; DE102014002219B4; CN106163694A

Designated contracting state (EPC)

DE ES FR IT

DOCDB simple family (publication)

WO 2005058524 A1 20050630; AT 412955 B 20050926; AT A20542003 A 20050215; DE 502004011620 D1 20101014;
EP 1694452 A1 20060830; EP 1694452 B1 20100901; ES 2351504 T3 20110207; JP 2007518567 A 20070712; US 2007107481 A1 20070517;
US 7334444 B2 20080226

DOCDB simple family (application)

AT 2004000436 W 20041213; AT 20542003 A 20031219; DE 502004011620 T 20041213; EP 04802001 A 20041213; ES 04802001 T 20041213;
JP 2006548028 A 20041213; US 58273204 A 20041213