

Title (en)

METHOD FOR PRODUCING A GEAR RACK, AND A STAMPING DEVICE FOR CARRYING OUT THE METHOD

Title (de)

VERFAHREN ZUM HERSTELLEN EINER ZAHNSTANGE UND PRÄGEVORRICHTUNG ZUM DURCHFÜHREN DES VERFAHRENS

Title (fr)

PROCEDE DE FABRICATION DE CREMAILLERE ET DISPOSITIF D'ESTAMPAGE PERMETTANT LA MISE EN OEUVRE DUDIT PROCEDE

Publication

**EP 1107840 B1 20030129 (DE)**

Application

**EP 99946006 A 19990821**

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Abstract (en)

[origin: DE19839428A1] The invention relates to a method for producing a blank (10) for a gear rack provided for rack-and-pinion steering assemblies of motor vehicles. The inventive method comprises the following steps: In a first step, a starting material (7) comprising an essentially circular cross-section is inserted into a stamping device which contains at least three form tools (1, 2, 3) that can be moved with regard to one another. In a second step, at least one force is exerted on at least one of the form tools (1, 2, 3) in at least one direction causing the form tools (1, 2, 3) to move with regard to one another so that the starting material (7) is reshaped into the blank (10) for the gear rack. The blank (10) is given a shape which differs from that of a circular cylinder in at least the axial area of the gearing of the future gear rack. Using this method, a portion of the material of said starting material is displaced, on one side, out of the middle in the future gearing area without effecting a high level of strain-hardening in this area. This leads to a facilitation of subsequent manufacturing processes.

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**B21K 1/76**

IPC 8 full level

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