

Title (en)

THIN-WALLED RING GEARS HAVING INNER AND OUTER TOOTHING, AND A DEVICE AND METHOD FOR PRODUCING SAME

Title (de)

DÜNNWANDIGE HOHLRÄDER MIT INNEN- UND AUSSENVERZÄHNUNG SOWIE VORRICHTUNG UND VERFAHREN ZU DEREN HERSTELLUNG

Title (fr)

COURONNES À PAROIS MINCES COMPORTANT UNE DENTURE INTÉRIEURE ET UNE DENTURE EXTÉRIEURE, AINSI QUE DISPOSITIF ET PROCÉDÉ DE PRODUCTION CORRESPONDANTS

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Application

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Abstract (en)

[origin: WO2019158656A1] The invention relates to a method for producing a ring gear which has inner toothing and outer toothing, the inner toothing being toothing for driving a pinion. In the method, a workpiece (1) is machined by a stamping tool (2). The workpiece (1) has a tubular section (3) with a longitudinal axis (Z) and a first stabilisation section (4) for stabilising the shape of the tubular section (3) during machining. The tubular section (3) is inserted into a die (5) which has inner die toothing (5z). The workpiece (1) is then machined on the inside by the stamping tool (2) to produce the inner toothing and the outer toothing simultaneously, in that the workpiece executes a rotational movement at a time-variable rotation speed, and the stamping tool (2) executes radially oscillating movements which are synchronised with said rotational movement. In the process, the stamping tool (2) shapes the tubular section (3) to produce the outer toothing while at the same time producing the inner toothing by repeated hammering of the tubular section (3) into the die toothing (5z).

IPC 8 full level

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