

Title (en)

METHOD FOR PRODUCING PERIODIC TOOTH FLANK MODIFICATIONS, MACHINE TOOL, AND COMPUTER-READABLE MEDIUM

Title (de)

VERFAHREN ZUR FERTIGUNG PERIODISCHER ZAHNFLANKENMODIFIKATIONEN, WERKZEUGMASCHINE UND COMPUTERLESBARES MEDIUM

Title (fr)

PROCÉDÉ POUR USINER DES MODIFICATIONS PÉRIODIQUES DE FLANCS DE DENTS, MACHINE-OUTIL ET SUPPORT LISIBLE PAR ORDINATEUR

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2012003975A2] The invention relates to a method for producing periodic tooth flank modifications, wherein a tool, during a first stroke carried out relative to a tooth flank of a tooth (1) of a workpiece (3) along an axis, which is rotated by an angle of inclination β relative to a center axis (2) of the workpiece (3) and which produces an enshrouding plane (4) in a plane orthogonal to end cut plane of the workpiece (3), wherein the enshrouding plane (4) is oriented orthogonally to an engagement plane (6) so that during the first stroke a machining track is created exactly along a first contact line (5) for a first corresponding rolling position by means of the machining effect of the tool on the workpiece (3). The first contact line (5) simultaneously forms a second contact line corresponding to the first contact line (5) between the workpiece (3) and any rolling partner of the same angle of inclination β and furthermore the tooth flank modification is created by means of an advancement by the value Z_u of the tool in the normal direction of the tool and/or of the workpiece (3) along the first contact line (5) and the workpiece (3) performs no rolling motion during the individual stroke. The invention further relates to a machine tool, which is designed to carry out said method, and to a computer-readable medium having instructions, which lead to the open- or closed-loop control of a machine tool according to the method above when executed by a processor.

IPC 8 full level

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See references of WO 2012003975A2

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