

Title (en)

METHOD FOR MACHINING A TOOTH FLANK REGION OF A WORKPIECE TOOTH ARRANGEMENT, CHAMFERING TOOL, CONTROL PROGRAM HAVING CONTROL INSTRUCTIONS FOR CARRYING OUT THE METHOD, AND GEAR-CUTTING MACHINE

Title (de)

VERFAHREN DER SPANENDEN BEARBEITUNG EINES ZAHNFLANKENBEREICHES EINER WERKSTÜCKVERZÄHNUNG, ANFASWERKZEUG, STEUERPROGRAMM MIT STEUERANWEISUNGEN ZUR DURCHFÜHRUNG DES VERFAHRENS UND VERZÄHNUNGSMASCHINE

Title (fr)

PROCÉDÉ D'USINAGE D'UNE RÉGION DE FLANC DE DENT D'UN AGENCEMENT DE DENTS DE PIÈCE À USINER, OUTIL DE CHANFREINAGE, PROGRAMME DE COMMANDE AYANT DES INSTRUCTIONS DE COMMANDE POUR LA MISE EN OEUVRE DU PROCÉDÉ, ET MACHINE À TAILLER DES ENGRENAGES

Publication

EP 4347160 A1 20240410 (DE)

Application

EP 22729447 A 20220510

Priority

- DE 102021002704 A 20210525
- EP 2022062597 W 20220510

Abstract (en)

[origin: WO2022248211A1] The invention relates to a method for machining a tooth edge which is formed between a tooth flank and a face side of a workpiece tooth arrangement using a tool tooth arrangement in which the tooth arrangements rotate in rolling-contact coupling with one another about their respective tooth arrangement axes of rotation. According to the invention, it is provided that the two tooth arrangement axes of rotation are substantially parallel to each other and the machining is undertaken over a plurality of workpiece rotations, wherein a first relative movement parallel to the workpiece axis of rotation is executed between the workpiece tooth arrangement and the tool tooth arrangement, and, by means of a second relative movement, which is varied in particular depending on the movement status of the first relative movement, the position of the envelope of the tool tooth rolling-contact positions relative to their engagement position with the tooth flank of the workpiece tooth arrangement is displaced transversely with respect to the profile of the workpiece tooth arrangement in the plane orthogonal to the workpiece axis of rotation.

IPC 8 full level

B23F 19/10 (2006.01); **B23F 1/00** (2006.01); **B23F 5/00** (2006.01); **B23F 21/12** (2006.01)

CPC (source: EP KR US)

B23F 1/02 (2013.01 - US); **B23F 19/10** (2013.01 - EP KR); **B23F 21/005** (2013.01 - KR); **B23F 23/006** (2013.01 - EP KR); **B23F 21/005** (2013.01 - EP)

Citation (search report)

See references of WO 2022248211A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

DE 102021002704 A1 20210729; CN 117377548 A 20240109; EP 4347160 A1 20240410; JP 2024520080 A 20240521; KR 20240011689 A 20240126; US 2024227049 A1 20240711; WO 2022248211 A1 20221201

DOCDB simple family (application)

DE 102021002704 A 20210525; CN 202280036988 A 20220510; EP 2022062597 W 20220510; EP 22729447 A 20220510; JP 2023573227 A 20220510; KR 20237039021 A 20220510; US 202218559589 A 20220510