

Title (en)

DEVICE, METHOD, AND CUTTING PLATE FOR MACHINING A ROTATING WORKPIECE

Title (de)

VORRICHTUNG, VERFAHREN UND SCHNEIDPLATTE ZUR SPANENDEN BEARBEITUNG EINES ROTIERENDEN WERKSTÜCKS

Title (fr)

DISPOSITIF, PROCÉDÉ ET PLAQUETTE DE COUPE SERVANT À L'USINAGE PAR ENLÈVEMENT DE COPEAUX D'UNE PIÈCE EN ROTATION

Publication

**EP 3261792 A1 20180103 (DE)**

Application

**EP 16707396 A 20160216**

Priority

- DE 102015102603 A 20150224
- DE 102015110398 A 20150629
- EP 2016053236 W 20160216

Abstract (en)

[origin: WO2016135005A1] The invention relates to a method and a device for machining a workpiece (2) rotating about a rotational axis (1). The machining point (8) moves along the cutting edge of a cutting edge plane (3) and the surface (7, 7') to be machined in a rolling movement on an advancement plane which is not intersected by the rotational axis (1). By using a pivot drive (25, 32), a large enough pivot angle can be implemented such that a first surface (7) of the workpiece (2) can be machined by a machining point (8) moving along the first cutting edge (4) in a first machining step using a first of the two cutting edges (4), and then in a second machining step using a second of the two cutting edges (4, 4'), a second surface (7') of the workpiece can be machined, wherein the machining point (8) moves along the second cutting edge (4') and the second surface (7') to be machined. Furthermore, the cutting edge (4, 4') has a curvature radius which is smaller than the distance from the pivot axis (9) of the holder (5) to the cutting edge (4, 4'), and the holder (5) can additionally be displaced on the advancement plane with a movement component in a direction transverse to the rotational axis (1).

IPC 8 full level

**B23B 29/24** (2006.01); **B23B 1/00** (2006.01); **B23B 3/06** (2006.01); **B23B 5/00** (2006.01); **B23B 27/12** (2006.01); **B23B 27/16** (2006.01); **B23Q 1/62** (2006.01); **G05B 19/18** (2006.01)

CPC (source: EP KR US)

**B23B 1/00** (2013.01 - EP US); **B23B 3/06** (2013.01 - EP KR US); **B23B 5/00** (2013.01 - EP KR US); **B23B 27/1611** (2013.01 - EP KR US); **B23B 29/12** (2013.01 - US); **B23B 29/242** (2013.01 - EP KR US); **B23Q 1/64** (2013.01 - US); **G05B 19/182** (2013.01 - EP KR US); **B23B 2200/123** (2013.01 - EP KR US); **B23B 2200/202** (2013.01 - EP KR US); **B23B 2200/208** (2013.01 - EP KR US); **B23B 2200/28** (2013.01 - EP KR US); **B23B 2220/123** (2013.01 - US); **B23B 2260/004** (2013.01 - EP KR US)

Citation (search report)

See references of WO 2016135005A1

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

DOCDB simple family (publication)

**DE 202016103064 U1 20160628**; CN 107249794 A 20171013; CN 107249794 B 20191119; DE 102016102651 A1 20160825; EP 3261792 A1 20180103; KR 20170129163 A 20171124; US 10493534 B2 20191203; US 2018029134 A1 20180201; WO 2016135005 A1 20160901; WO 2016135005 A9 20170330

DOCDB simple family (application)

**DE 202016103064 U 20160216**; CN 201680011670 A 20160216; DE 102016102651 A 20160216; EP 16707396 A 20160216; EP 2016053236 W 20160216; KR 20177027098 A 20160216; US 201615551515 A 20160216