

Title (en)

TOOL AND MACHINE TOOL AND METHOD FOR MACHINING PLATE-LIKE WORKPIECES

Title (de)

WERKZEUG UND WERKZEUGMASCHINE SOWIE VERFAHREN ZUM BEARBEITEN VON PLATTENFÖRMIGEN WERKSTÜCKEN

Title (fr)

OUTIL ET MACHINE-OUTIL AINSI QUE PROCÉDÉ D'USINAGE DE PIÈCES EN FORME DE PLAQUE, EN PARTICULIER DE TÔLES

Publication

**EP 3515625 A1 20190731 (DE)**

Application

**EP 17784194 A 20170926**

Priority

- DE 102016118175 A 20160926
- DE 102016119435 A 20161012
- EP 2017074299 W 20170926

Abstract (en)

[origin: WO2018055184A1] The invention relates to a tool and a machine tool and to a method for machining plate-like workpieces (10), in particular metal sheets, having an upper tool (11) and having a lower tool (9), which can be moved toward each other to machine a workpiece (10) arranged between, wherein the upper tool (11) has a clamping shaft (34) and a base body (33), which comprise a common position axis (35), and comprises a machining tool (37), which is arranged on the base body (33), opposite the clamping shaft (34), and wherein the lower tool (9) has a base body (41) which comprises a supporting surface (47) for the workpiece (10) and an opening (46) located within the supporting surface (47), wherein a tool body (39) accommodating the machining tool (37) has a longitudinal axis (40) which is inclined with respect to the positioning axis (35) of the upper tool (11).

IPC 8 full level

**B21D 28/34** (2006.01); **B21D 5/02** (2006.01); **B21D 19/08** (2006.01); **B21D 28/02** (2006.01); **B21D 28/12** (2006.01); **B21D 35/00** (2006.01)

CPC (source: EP US)

**B21D 19/08** (2013.01 - EP US); **B21D 28/02** (2013.01 - EP US); **B21D 28/125** (2013.01 - EP US); **B21D 28/34** (2013.01 - EP US); **B21D 35/001** (2013.01 - EP US)

Citation (search report)

See references of WO 2018055184A1

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)

**WO 2018055184 A1 20180329**; CN 109789472 A 20190521; EP 3515625 A1 20190731; JP 2019529119 A 20191017; JP 6992055 B2 20220113; US 2019217368 A1 20190718

DOCDB simple family (application)

**EP 2017074299 W 20170926**; CN 201780058768 A 20170926; EP 17784194 A 20170926; JP 2019514020 A 20170926; US 201916360657 A 20190321