

Title (en)
AXLE ARRANGEMENT FOR A MACHINE TOOL

Title (de)
ACHSANORDNUNG FÜR EINE WERKZEUGMASCHINE

Title (fr)
ENSEMBLE D'AXES POUR UNE MACHINE-OUTIL

Publication
EP 3898047 A1 20211027 (DE)

Application
EP 19817260 A 20191206

Priority
• DE 102018132614 A 20181218
• EP 2019083970 W 20191206

Abstract (en)
[origin: WO2020126545A1] The invention relates to an axle arrangement (10) for a machine tool. In an axle housing (11), a receiving spindle (12) is mounted so as to be rotatable about a longitudinal axis by means of a spindle bearing arrangement (13). The receiving spindle (12) serves to receive a clamping unit (23), which is able to be shifted between a clamping position and a release position by means of a cylinder device (25). To this end, the cylinder device (25) has a piston (28), which is movable in the axial direction (A) parallel to the longitudinal axis (L) and on which a piston rod (41) is mounted in a rotatable manner. In the cylinder housing (26), the receiving spindle (12) is supported on the cylinder housing (26) in the axial direction (A) by means of a first axial bearing (39). The piston rod (41) is supported on the piston (28) by means of a second axial bearing (42) in the axial direction (A). Preferably, the receiving spindle (12) is supported only in the axial direction (A) in the cylinder housing (26).

IPC 8 full level
B23B 31/20 (2006.01)

CPC (source: EP KR US)
B23B 31/207 (2013.01 - EP US); **B23B 31/2072** (2021.01 - KR); **B23B 2260/008** (2013.01 - EP KR US); **B23B 2270/027** (2013.01 - EP KR US)

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 102018132614 A1 20200618; **DE 102018132614 B4 20200702**; AU 2019407124 A1 20210603; CN 113195137 A 20210730; EP 3898047 A1 20211027; JP 2022510825 A 20220128; KR 20210102394 A 20210819; TW 202031387 A 20200901; TW I814959 B 20230911; US 2022048118 A1 20220217; WO 2020126545 A1 20200625

DOCDB simple family (application)
DE 102018132614 A 20181218; AU 2019407124 A 20191206; CN 201980083736 A 20191206; EP 19817260 A 20191206; EP 2019083970 W 20191206; JP 2021528411 A 20191206; KR 20217021944 A 20191206; TW 108145042 A 20191210; US 201917415126 A 20191206