

Title (en)

TRANSPORTING DEVICE FOR TRANSFERRING WORKPIECES IN A PROCESSING FACILITY

Title (de)

TRANSPORTVORRICHTUNG ZUM UMSETZEN VON WERKSTÜCKEN IN EINER BEARBEITUNGSEINRICHTUNG

Title (fr)

DISPOSITIF DE TRANSPORT POUR DÉPLACER DES PIÈCES DANS UN DISPOSITIF D'USINAGE

Publication

EP 3448595 A1 20190306 (DE)

Application

EP 17719570 A 20170425

Priority

- CH 5602016 A 20160428
- EP 2017059720 W 20170425

Abstract (en)

[origin: WO2017186672A1] A transporting device for transferring workpieces in a processing facility comprising at least two stages comprises at least two gripping tool units (30), each for gripping a workpiece, which gripping tool units (30) are arranged on a gripping tool carrier (30) that can be moved back and forth between the stages of the processing facility. The gripping tool carrier (20) is on the one hand mounted such that it can be moved in a linearly guided manner and on the other hand mounted such that it can be deflected transversely in relation to its linearly guided mobility by means of a parallelogram guiding arrangement (11-14). The gripping tool carrier (20) is movable by means of gripping tool carrier drives (51-56) comprising two crank mechanisms (51-54) each with an assigned gripping tool carrier drive motor (55, 56). In this case, each crank mechanism (51-54) has a crank (51, 52), which can be driven in a rotatable manner by the assigned gripping tool carrier drive motor (55, 56), and a drive bar (53, 54), which is connected in an articulated manner to the crank (51, 52) on the one hand and the gripping tool carrier (20) on the other hand. The respective gripping tool carrier drive motors (55, 56) allow the transporting device to be decoupled from the drivetrain of the processing facility, whereby in the event of a fault the gripping tool carrier (20) can be quickly brought into a safe position.

IPC 8 full level

B21D 43/04 (2006.01); **B21D 43/05** (2006.01); **B21D 43/10** (2006.01); **B21K 27/04** (2006.01)

CPC (source: EA EP KR US)

B21D 43/05 (2013.01 - EA EP KR US); **B21D 43/10** (2013.01 - EA EP KR US); **B21K 27/04** (2013.01 - EA EP KR US)

Citation (search report)

See references of WO 2017186672A1

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 2017186672 A1 20171102; CH 712401 A1 20171031; CN 109070179 A 20181221; CN 109070179 B 20201222; EA 201892454 A1 20190329; EP 3448595 A1 20190306; EP 3448595 B1 20200401; ES 2785156 T3 20201006; JP 2019518610 A 20190704; JP 6832955 B2 20210224; KR 102296052 B1 20210901; KR 20180136948 A 20181226; TW 201739535 A 20171116; US 10737313 B2 20200811; US 2019134694 A1 20190509

DOCDB simple family (application)

EP 2017059720 W 20170425; CH 5602016 A 20160428; CN 201780025914 A 20170425; EA 201892454 A 20170425; EP 17719570 A 20170425; ES 17719570 T 20170425; JP 2018556320 A 20170425; KR 20187029922 A 20170425; TW 106114106 A 20170427; US 201716096715 A 20170425