

Title (en)

Machine tool and method for pushing out a workpiece part

Title (de)

Werkzeugmaschine und Verfahren zum Ausschieben eines Werkstückteils

Title (fr)

Machine-outil et procédé destinés à l'évacuation d'une partie d'une pièce

Publication

EP 2669024 B1 20170705 (DE)

Application

EP 12169979 A 20120530

Priority

EP 12169979 A 20120530

Abstract (en)

[origin: EP2669024A1] The machine tool has a drive unit to move a punching stamper (9) and a punching die of a punching tool relative to each other along a lifting axis (15) to freely cut a component (4b) of a plate-like workpiece (4). A detection device is provided to detect a reference position of a blank holder (24) along lifting axis. A scraper (25) is arranged on a top face of the workpiece. A control device is provided to position the scraper at a predetermined distance from the reference position for ejection of the workpiece component. An independent claim is included for a method for ejecting component of workpiece.

IPC 8 full level

B21D 28/26 (2006.01); **B21D 45/00** (2006.01); **B21D 45/10** (2006.01)

CPC (source: EP US)

B21D 28/265 (2013.01 - EP US); **B21D 45/006** (2013.01 - EP US); **B21D 45/08** (2013.01 - EP US); **B21D 45/10** (2013.01 - EP US); **Y10T 83/0448** (2015.04 - EP US); **Y10T 83/2137** (2015.04 - EP US)

Cited by

DE102019129787A1; CN109013941A; CN108372227A; EP3219404A1; US10543522B2

Designated contracting state (EPC)

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DOCDB simple family (publication)

EP 2669024 A1 20131204; **EP 2669024 B1 20170705**; CN 103506518 A 20140115; CN 103506518 B 20171031; JP 2013248668 A 20131212; JP 6141105 B2 20170607; US 2013319194 A1 20131205; US 2016052040 A1 20160225; US 9205481 B2 20151208; US 9446442 B2 20160920

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