

Title (en)

PROCESSING WORKPIECES WITH DIES BEING LEVEL COMPENSATED WITH A COMPENSATION ELEMENT

Title (de)

BEARBEITUNG VON WERKSTÜCKEN MITTELS MATRIZEN, DIE MIT EINEM AUSGLEICHSELEMENT EBENENKOMPENSIERT SIND

Title (fr)

TRAITEMENT DE PIÈCES AVEC MATRICES À NIVEAU COMPENSÉ AVEC UN ÉLÉMENT DE COMPENSATION

Publication

EP 3153286 A1 20170412 (EN)

Application

EP 15020182 A 20151009

Priority

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Abstract (en)

A die processing machine (100) for processing a workpiece (190) comprises (a) a first platen (110); (b) a second platen (115); (c) a lifting system (120) for providing a relative movement between the two platens (110, 115) along a predetermined direction (z); (d) a die processing tool (130) being located in between the two platens (110, 115) and being mechanically connected with the first platen (110), wherein the die processing tool (130) comprises at least two dies (132); (e) a back plate (140) being mechanically connected with the second platen, wherein a workpiece (190) is insertable in between the back plate (140) and the die processing tool (130); (f) a compensation element (150) being located in between the first platen (110) and the die processing tool (130) for providing an appropriate leveling of the at least two dies; (g) a mechanical action sensor (160) being non-detachably located in between the two platens and providing mechanical action data signals which are indicative for mechanical actions being assigned to the at least two dies when processing the workpiece; and (h) a data processing unit (165) being configured for processing the mechanical action data signals such that geometric data are provided for a further compensation element (350) resulting, when processing further workpieces (190), in an at least partially uniform pressure distribution in processing regions being assigned to the at least two dies (132). Described are further a die processing system (4000) and a method for processing workpieces.

IPC 8 full level

B26F 1/44 (2006.01); **B26D 5/00** (2006.01); **B26F 1/02** (2006.01); **B31F 1/07** (2006.01)

CPC (source: EP)

B26D 5/00 (2013.01); **B26F 1/02** (2013.01); **B26F 1/44** (2013.01); **B26F 2001/4409** (2013.01); **B26F 2001/4418** (2013.01); **B26F 2001/4463** (2013.01); **B31B 50/142** (2017.07); **B31B 50/88** (2017.07); **B31F 1/07** (2013.01)

Citation (applicant)

- EP 2705936 A1 20140312 - HEIDELBERGER DRUCKMASCH AG [DE]
- EP 2327521 A1 20110601 - HEIDELBERGER DRUCKMASCH AG [DE]

Citation (search report)

- [AD] EP 2327521 A1 20110601 - HEIDELBERGER DRUCKMASCH AG [DE]
- [AD] EP 2705936 A1 20140312 - HEIDELBERGER DRUCKMASCH AG [DE]
- [A] US 4763551 A 19880816 - HALFF ALBERT [DE], et al

Cited by

CN109764990A; CN111496925A; CN109795022A; CN108909142A

Designated contracting state (EPC)

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