

Title (en)

PLANE PLATE OF A PRESSING TOOL

Title (de)

EBENENPLATTE EINES PRESSENWERKZEUGS

Title (fr)

PLAQUE DE Matriçage CONÇUE POUR UN MOULE DE PRESSE

Publication

**EP 3645259 A1 20200506 (DE)**

Application

**EP 18735308 A 20180629**

Priority

- DE 102017114455 A 20170629
- EP 2018067682 W 20180629

Abstract (en)

[origin: WO2019002593A1] The invention relates to a plane plate (1) for a pressing tool (2) of a press (3), wherein: the plane plate (1) can be moved by means of at least one lifting cylinder (4) along an axial direction (5) in order to actuate a punch (6) of the press (3); the plane plate (1) has an upper side (39) pointing in a first axial direction (38) and a lower side (41) pointing in a second axial direction (40) opposing the first axial direction (38), a connection (34) for the at least one lifting cylinder (4), a centrally located receiving portion (9) for contacting the punch (6) or a punch holder of the press (3), and at least one first guide surface (7), which is parallel to the axial direction (5) and at least part of which is cylindrical, for contacting a first guide column (8), and a second guide surface (31), which is parallel to the axial direction (5) and at least part of which is cylindrical, for contacting a second guide column (37); on the lower side (41) of the plane plate (1), the first guide surface (7) has a first lower end (28) and the second guide surface (31) has a second lower end (32); and the first lower end (28) and the second lower end (32) are arranged at heights (29) which differ from one another with respect to the axial direction (5) and thus are spaced apart from one another in the axial direction (5).

IPC 8 full level

**B30B 11/02** (2006.01); **B22F 3/03** (2006.01); **B30B 15/06** (2006.01)

CPC (source: EP US)

**B22F 3/03** (2013.01 - EP); **B30B 11/027** (2013.01 - EP US); **B30B 15/067** (2013.01 - EP US); **B22F 2003/033** (2013.01 - EP)

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 102017114455 B3 20181031**; CN 110997297 A 20200410; CN 110997297 B 20211207; EP 3645259 A1 20200506;  
EP 3645259 B1 20231101; ES 2969891 T3 20240523; JP 2020525296 A 20200827; JP 7074783 B2 20220524; US 11479007 B2 20221025;  
US 2021354415 A1 20211118; WO 2019002593 A1 20190103

DOCDB simple family (application)

**DE 102017114455 A 20170629**; CN 201880056511 A 20180629; EP 18735308 A 20180629; EP 2018067682 W 20180629;  
ES 18735308 T 20180629; JP 2019572019 A 20180629; US 201816625585 A 20180629