

Title (en)

FORGING PRESS AND METHOD FOR FORGING A WORKPIECE IN A FORGING PRESS

Title (de)

SCHMIEDEPRESSE UND VERFAHREN ZUM SCHMIEDEN EINES WERKSTÜCKS IN EINER SCHMIEDEPRESSE

Title (fr)

PRESSE À FORGER ET PROCÉDÉ POUR FORGER UNE PIÈCE DANS UNE PRESSE À FORGER

Publication

**EP 3423210 A1 20190109 (DE)**

Application

**EP 17716773 A 20170224**

Priority

- DE 102016103927 A 20160304
- DE 2017100149 W 20170224

Abstract (en)

[origin: WO2017148472A1] The invention relates to a forging press with a forging press frame comprising an upper die, a lower die, a primary drive, which acts relative to the forging press frame, for applying primary shaping forces onto a workpiece between the upper die and the lower die, and a secondary drive for applying secondary shaping forces onto the workpiece. The invention also relates to a method for forging a workpiece in a forging press with an upper die, a lower die, and a primary drive by means of which a primary movement that has a shaping effect is driven between the upper die and the lower die. The workpiece is also shaped by a secondary movement of a secondary die in addition to the shaping process produced by the primary movement, said secondary movement having a shaping effect and being driven by a secondary drive. According to the invention, different types of forging processes, such as free-form forging, drop forging, and/or sizing, can be carried out in an energy-saving manner if the secondary drive is supported on assemblies which are loaded by the primary drive with primary shaping forces in the direction of the workpiece or if the secondary drive drives a secondary die and the secondary die is moved independently of the primary drive assemblies driving the primary movement for the secondary movement of the secondary die.

IPC 8 full level

**B21J 9/02** (2006.01); **B21J 9/10** (2006.01); **B30B 1/32** (2006.01); **B30B 1/36** (2006.01); **B30B 15/00** (2006.01); **B30B 15/04** (2006.01)

CPC (source: EP)

**B21J 9/02** (2013.01); **B21J 9/10** (2013.01); **B30B 1/32** (2013.01); **B30B 15/0035** (2013.01)

Citation (search report)

See references of WO 2017148472A1

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 102016103927 A1 20170907**; CN 108712937 A 20181026; CN 108712937 B 20221227; EP 3423210 A1 20190109; EP 3423210 B1 20220406; ES 2921985 T3 20220905; JP 2019507018 A 20190314; JP 7107844 B2 20220727; WO 2017148472 A1 20170908

DOCDB simple family (application)

**DE 102016103927 A 20160304**; CN 201780015086 A 20170224; DE 2017100149 W 20170224; EP 17716773 A 20170224; ES 17716773 T 20170224; JP 2018539970 A 20170224