

Title (en)

METHOD FOR OPERATING A HYDRAULIC PRESS, AND HYDRAULIC PRESS

Title (de)

VERFAHREN ZUM BETREIBEN EINER HYDRAULISCHEN PRESSE UND EINE HYDRAULISCHE PRESSE

Title (fr)

PROCÉDÉ DE FONCTIONNEMENT D'UNE PRESSE HYDRAULIQUE ET PRESSE HYDRAULIQUE

Publication

EP 2846994 A1 20150318 (DE)

Application

EP 13722386 A 20130507

Priority

- DE 102012104125 A 20120510
- EP 2013059544 W 20130507

Abstract (en)

[origin: WO2013167630A1] The invention relates to a hydraulic press (10) and a method for operating a hydraulic press (10) in cycles. The aim of the invention is to lower energy consumption in a method for shaping workpieces by means of a hydraulic press and in a hydraulic press for shaping workpieces. With respect to the method, said aim is achieved in that each cycle has at least one phase in which the storage pressure p_s in the accumulator (15) causes hydraulic fluid to be pressed from a hydraulic accumulator (15) into a chamber (11.1, 11.2) of a hydraulic cylinder (11) of the press (10) in order to move a ram (12) of the press (10) relative to the cylinder (11), said ram, to which a tool (21) for shaping a workpiece can be coupled, being coupled to the cylinder (11); and in that in at least one portion of each cycle, a hydraulic pump (13) driven by a motor (14) delivers hydraulic fluid to the accumulator (15) at a charging volume flow rate, and the storage pressure p_s is adjusted to a reference value PSOLLby setting the speed of the motor (14) to a nominal motor speed n_N and to at least one intermediate value n_z , where $0 < n_z < n_N$.

IPC 8 full level

B30B 15/16 (2006.01); **F15B 1/02** (2006.01); **F15B 1/033** (2006.01); **F15B 7/00** (2006.01)

CPC (source: EP US)

B30B 15/163 (2013.01 - EP US); **F15B 1/033** (2013.01 - US); **F15B 2201/51** (2013.01 - EP US); **F15B 2211/20515** (2013.01 - EP US);
F15B 2211/20538 (2013.01 - EP US); **F15B 2211/212** (2013.01 - EP US); **F15B 2211/25** (2013.01 - EP US); **F15B 2211/6313** (2013.01 - EP US);
F15B 2211/6651 (2013.01 - EP US); **F15B 2211/6653** (2013.01 - EP US)

Citation (search report)

See references of WO 2013167630A1

Cited by

CN106122160A

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 2013167630 A1 20131114; CN 104284772 A 20150114; CN 104284772 B 20170707; DE 102012104125 A1 20131114;
EP 2846994 A1 20150318; EP 2846994 B1 20201125; JP 2015522419 A 20150806; KR 20150006476 A 20150116; RU 2014149771 A 20160710;
US 2015083002 A1 20150326

DOCDB simple family (application)

EP 2013059544 W 20130507; CN 201380024431 A 20130507; DE 102012104125 A 20120510; EP 13722386 A 20130507;
JP 2015510806 A 20130507; KR 20147034381 A 20130507; RU 2014149771 A 20130507; US 201314399822 A 20130507