Title (en)

FOUR-DIE FORGING DEVICE

Title (de)

SCHMIEDEPRODUKT MIT VIER GESENKEN

Title (fr)

DISPOSITIF DE FORGEAGE À QUATRE PERCUTEURS

Publication

EP 2014390 A4 20090401 (DE)

Application

EP 07747785 A 20070124

Priority

RU 2007000029 W 20070124

Abstract (en)

[origin: WO2008091176A1] The invention relates to metal forming and can be used for forging billets and blanks by means of forging presses and radial-swaging machines. Four dies are mounted on holders which are provided with inclined planes and antifriction plates arranged thereon. The holders of the top and lower dies are kinematically connected to the holders of the lateral dies. Centring guides are mounted on the inclined planes of the top and lower die holders or on the inclined planes of the lateral die holders. They are placed in centring grooves which are formed by the groove walls of the lateral die holders or the top and lower die holders and the side planes of respective antifriction plates. The device also comprises lateral separating guides provided with an F-shaped cross-section. The width of the working face of each die is equal to 0.5-0.9 the width of the supporting surface thereof. The ratio between the total contact area of the antifriction plates of the lateral die holders with the antifriction plates of the top and lower holders in the closed device (S₁) and the total area of the projection of the working faces of the lateral dies on the longitudinal symmetry plane (S₂) of the device is defined by the formula S₁/S₂=2.5. Said invention makes it possible to extend the service life of the device.

IPC 8 full level

B21J 13/02 (2006.01); **B21J 7/14** (2006.01); **B21J 7/16** (2006.01)

CPC (source: EP KR)

B21J 3/00 (2013.01 - KR); **B21J 7/14** (2013.01 - EP); **B21J 7/16** (2013.01 - KR); **B21J 13/02** (2013.01 - KR); **B21J 13/03** (2013.01 - EP)

Citation (search report)

- No further relevant documents disclosed
- See references of WO 2008091176A1

Cited by

DE102014211773B4; CN104289650A; DE102015201207B4; CN111618222A; CN102303084A; DE102014211773A1; US9821367B2; US9283614B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 2014390 A1 20090114; **EP 2014390 A4 20090401**; **EP 2014390 B1 20100324**; AT E461765 T1 20100415; CN 101356029 A 20090128; CN 101356029 B 20110622; DE 502007003223 D1 20100506; ES 2344088 T3 20100817; KR 101189333 B1 20121009; KR 20100014060 A 20100210; WO 2008091176 A1 20080731

DOCDB simple family (application)

EP 07747785 A 20070124; AT 07747785 T 20070124; CN 200780001312 A 20070124; DE 502007003223 T 20070124; ES 07747785 T 20070124; KR 20087017890 A 20070124; RU 2007000029 W 20070124