

Title (en)
Method and device for forming of metals

Title (de)
Verfahren und Vorrichtung zur Umformung von Metallen

Title (fr)
Procédé et dispositif de formage des métaux

Publication
EP 1025925 B1 20020410 (DE)

Application
EP 99810499 A 19990607

Priority

- EP 99810499 A 19990607
- EP 99810086 A 19990202
- EP 99810464 A 19990527

Abstract (en)
[origin: EP1025925A1] The deforming process involves clamping the metal part (2) in a clamping device (4) to form a forging cavity (13) in the swage (5) with the part clamped to take forging forces directly; applying a forging hammer (7) to force metal into the forging cavity, exerting pressure on the hammer so that the mechanical stress is within the Hooke elastic region, applying a pulse with the hammer so that the metal passes into the flowing region and repeating the last two stages.

IPC 1-7
B21J 5/08

IPC 8 full level
B21J 5/08 (2006.01); **B21K 21/12** (2006.01)

CPC (source: EP KR)
B21J 5/08 (2013.01 - EP KR); **B21K 21/12** (2013.01 - EP)

Cited by
CN103272981A; CN103537596A; CH703639A1; CN107520397A; WO2012024805A1

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
EP 1025925 A1 20000809; EP 1025925 B1 20020410; AT E215855 T1 20020415; AU 2090000 A 20000825; AU 754548 B2 20021121; BR 0007963 A 20011106; CA 2361521 A1 20000810; CN 1338978 A 20020306; CZ 20012614 A3 20020313; DE 59901178 D1 20020516; ES 2178366 T3 20021216; HU P0105356 A2 20020429; HU P0105356 A3 20020528; JP 2002536182 A 20021029; KR 20010101918 A 20011115; MX PA01007798 A 20030604; PL 349096 A1 20020701; PT 1025925 E 20020930; WO 0045976 A1 20000810

DOCDB simple family (application)
EP 99810499 A 19990607; AT 99810499 T 19990607; AU 2090000 A 20000201; BR 0007963 A 20000201; CA 2361521 A 20000201; CH 0000052 W 20000201; CN 00803335 A 20000201; CZ 20012614 A 20000201; DE 59901178 T 19990607; ES 99810499 T 19990607; HU P0105356 A 20000201; JP 2000597080 A 20000201; KR 20017009700 A 20010801; MX PA01007798 A 20000201; PL 34909600 A 20000201; PT 99810499 T 19990607