

Title (en)

METHOD OF PRIMARY FORMING A MATERIAL AND APPARATUS FOR CARRYING IT OUT

Title (de)

VERFAHREN ZUM URFORMEN EINES WERKSTOFFES UND VORRICHTUNG ZU DESSEN DURCHFÜHRUNG

Title (fr)

PROCEDE DE FORMAGE PRIMAIRE D'UN MATERIAU ET DISPOSITIF POUR SON MIS EN OEUVRE

Publication

**EP 1230050 B1 20050810 (DE)**

Application

**EP 00982977 A 20001010**

Priority

- DE 0003538 W 20001010
- DE 19950037 A 19991016

Abstract (en)

[origin: US6820679B1] The invention relates to a method according to which a metal (13) is re-shaped by a primary forming process. The aim of the invention is to improve such a method so that heat can be relatively easily added to the part and so that the addition can be varied as regards space and time. To this end, a voltage is applied to parts of the primary forming device between which the metal is disposed during the insertion process and/or during the primary forming process and/or during a subsequent treatment in the primary form after the primary forming process so that a closed circuit is produced and heat energy is supplied to the metal by the closed circuit.

IPC 1-7

**B22D 27/04**

IPC 8 full level

**B21J 5/00** (2006.01); **B21J 9/08** (2006.01); **B22D 17/00** (2006.01); **B22D 27/04** (2006.01)

CPC (source: EP US)

**B21J 1/025** (2013.01 - EP US); **B21J 1/06** (2013.01 - EP US); **B21J 5/00** (2013.01 - EP US); **B21J 9/08** (2013.01 - EP US); **B22D 17/007** (2013.01 - EP US); **B22D 27/04** (2013.01 - EP US)

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)

**US 6820679 B1 20041123**; AT E301521 T1 20050815; AU 1993001 A 20010430; DE 19950037 A1 20010503; DE 19950037 C2 20011213; DE 50010936 D1 20050915; EP 1230050 A2 20020814; EP 1230050 B1 20050810; ES 2246256 T3 20060216; WO 0128713 A2 20010426; WO 0128713 A3 20010913

DOCDB simple family (application)

**US 11017702 A 20020912**; AT 00982977 T 20001010; AU 1993001 A 20001010; DE 0003538 W 20001010; DE 19950037 A 19991016; DE 50010936 T 20001010; EP 00982977 A 20001010; ES 00982977 T 20001010