

Title (en)

Method for forming a plate of heat treatable steel and device for carrying out thereof

Title (de)

Verfahren zur Umformung einer Platine aus einem Vergütungsstahl und Vorrichtung zur Durchführung des Verfahrens

Title (fr)

Procédé de formage d'une tôle en acier de traitement et dispositif pour la mise en oeuvre du procédé

Publication

**EP 1462192 B1 20080723 (DE)**

Application

**EP 04005921 A 20040312**

Priority

DE 10314115 A 20030328

Abstract (en)

[origin: EP1462192A1] A process for deformation of a plate bar from heat treated steel by the steps:deformation of a preprepared structural part (6) from an unhardened plate bar (1) at a deformation temperature by mechanical force to produce a structural part of geometry already corresponding to that of the hardened finished part (7), austenization of part (6) under a shielding atmosphere (9), and final hardening of part (6) by a heat treatment/cooling tool (11) to give the finished part (7). An independent claim is included for a device including a press (5) for production of prepared part (6), an oven (8), a transport unit (10), tool (11).

IPC 8 full level

**B21D 35/00** (2006.01); **B21D 22/02** (2006.01); **C21D 1/673** (2006.01); **C21D 9/46** (2006.01); **C21D 1/18** (2006.01)

CPC (source: EP)

**B21D 22/02** (2013.01); **B21D 35/00** (2013.01); **C21D 1/673** (2013.01); **C21D 9/46** (2013.01); **C21D 9/48** (2013.01); **C21D 1/18** (2013.01)

Cited by

JP2010520058A; CN103801605A; EP2314397A1; EP2110448A3; CN104405073A; DE102014109315A1; DE102014109315B4; CN111604397A; EP2239065A3; CN102266900A; CN103003002A; EP2233593A3; EA015975B1; US8272245B2; WO2008104360A1; WO2009116005A1; WO2010127837A3; WO2011141367A1; US9975157B2; DE102014109315C5

Designated contracting state (EPC)

AT CZ ES HU SK

DOCDB simple family (publication)

**EP 1462192 A1 20040929**; **EP 1462192 B1 20080723**; AT E401977 T1 20080815; DE 10314115 A1 20041014; ES 2308058 T3 20081201

DOCDB simple family (application)

**EP 04005921 A 20040312**; AT 04005921 T 20040312; DE 10314115 A 20030328; ES 04005921 T 20040312