

Title (en)

METHOD AND DEVICE FOR PARTIALLY HARDENING SHEET METAL COMPONENTS

Title (de)

VERFAHREN UND VORRICHTUNG ZUM PARTIELLEN HÄRTEN VON BLECHBAUTEILEN

Title (fr)

PROCÉDÉ ET DISPOSITIF POUR LE DURCISSEMENT PARTIEL DE COMPOSANTS EN TÔLE

Publication

EP 2791372 A1 20141022 (DE)

Application

EP 12780705 A 20121023

Priority

- DE 102011056444 A 20111214
- EP 2012070911 W 20121023

Abstract (en)

[origin: WO2013087274A1] The invention relates to a method for producing partially-hardened components from steel sheets, in which a component that is cold-formed from a hardenable steel sheet material is heated, in a furnace, to a temperature below the austenitisation temperature (< Ac3), and a radiating element acts upon the component in sections where said component is to be austenitised (< Ac3), this radiating element having a component-side contour that corresponds to the contour of the component in the section to be austenitised. The invention also relates to a device for carrying out said method.

IPC 8 full level

C21D 1/34 (2006.01); **C21D 1/673** (2006.01); **C21D 8/04** (2006.01); **C21D 9/00** (2006.01); **C21D 9/46** (2006.01); **C21D 9/48** (2006.01); **C22C 38/00** (2006.01); **C23C 2/02** (2006.01)

CPC (source: EP US)

C21D 1/673 (2013.01 - EP US); **C21D 8/04** (2013.01 - EP US); **C21D 8/0494** (2013.01 - EP US); **C21D 9/00** (2013.01 - EP US); **C21D 9/0006** (2013.01 - EP US); **C21D 9/46** (2013.01 - EP US); **C21D 9/48** (2013.01 - EP US); **C21D 1/34** (2013.01 - EP US); **C21D 2221/00** (2013.01 - EP US); **C22C 38/00** (2013.01 - EP US)

Citation (search report)

See references of WO 2013087274A1

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

DOCDB simple family (publication)

DE 102011056444 A1 20130808; **DE 102011056444 B3 20130103**; **DE 102011056444 C5 20151015**; CN 103998630 A 20140820; CN 103998630 B 20161005; EP 2791372 A1 20141022; EP 2791372 B1 20170628; ES 2635089 T3 20171002; US 10000823 B2 20180619; US 2014345757 A1 20141127; WO 2013087274 A1 20130620

DOCDB simple family (application)

DE 102011056444 A 20111214; CN 201280061432 A 20121023; EP 12780705 A 20121023; EP 2012070911 W 20121023; ES 12780705 T 20121023; US 201214365310 A 20121023