

Title (en)

Steel sheet heating device, method for producing press-formed part, and press-formed part

Title (de)

Stahlblecherwärmungsvorrichtung, Verfahren zur Herstellung eines pressgeformten Teils und pressgeformtes Teil

Title (fr)

Dispositif de chauffage de feuille d'acier, procédé pour produire une pièce formée de presse et pièce formée de presse

Publication

EP 2395116 A2 20111214 (EN)

Application

EP 11168891 A 20110607

Priority

JP 2010133947 A 20100611

Abstract (en)

It is provided a steel sheet heating device (10) that heats a flat steel sheet (16, 60), characterized by including: a hot plate (12, 14, 40) having a flat heating surface (12f, 14f, 42f, 44f, 46f) brought into close contact with the steel sheet; and a plurality of heating equipment (18, 18a-18m, 52) able to heat a plurality of heating regions (20a-20d, 42, 44, 46), formed by dividing the heating surface of the hot plate into a plurality of sections, to different heating temperatures at the same time, wherein the steel sheet is heated to different temperatures at various portions based on the heating temperatures of the plurality of heating regions of the heating surface, at the same time through a single heating treatment.

IPC 8 full level

C21D 1/673 (2006.01); **C21D 9/00** (2006.01); **H05B 3/22** (2006.01)

CPC (source: EP US)

C21D 1/673 (2013.01 - EP US); **C21D 9/0068** (2013.01 - EP US); **C21D 2221/00** (2013.01 - EP US)

Citation (applicant)

- JP 2010133947 A 20100617 - BIOMARKER SCIENCE KK, et al
- JP 2000177630 A 20000627 - MITSUBISHI MOTORS CORP
- JP 2009095869 A 20090507 - AISIN TAKAOKA LTD

Cited by

EP3530760A1; EP3985133A3; US11118239B2; WO2017144217A1; WO2016012442A1; US10612108B2; EP2907881B1; EP2907881B2; EP2691550A2

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

Designated extension state (EPC)

BA ME

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DOCDB simple family (application)

EP 11168891 A 20110607; CN 201110157138 A 20110613; JP 2010133947 A 20100611; US 201113067568 A 20110609