

Title (en)

WARM PRESS FORMING METHOD AND AUTOMOBILE FRAME COMPONENT

Title (de)

HEISSPRESSFORMVERFAHREN UND KAROSSERIEKOMPONENTEN EINES KRAFTFAHRZEUGS

Title (fr)

PROCÉDÉ DE FORMAGE SOUS PRESSION À CHAUD ET COMPOSANT DE CHÂSSIS D'AUTOMOBILE

Publication

**EP 2823905 A4 20150701 (EN)**

Application

**EP 13757922 A 20130304**

Priority

- JP 2012048725 A 20120306
- JP 2013001316 W 20130304

Abstract (en)

[origin: EP2823905A1] Disclosed is a method for forming a steel sheet having a tensile strength of 440 MPa or more into a press-formed part including a flange portion and other portions by press forming, the method includes: heating the steel sheet to a temperature range of 400 °C to 700 °C; and then press-forming the heated steel sheet using draw forming to obtain a press-formed part, with the steel sheet being held at a press bottom dead point in the die for one second to five seconds. In this way, geometric changes such as springback that occur in a panel can be suppressed, the dimensional accuracy of the panel can be enhanced accordingly, and the desired mechanical properties can easily be obtained in the press-formed part.

IPC 8 full level

**B21D 22/20** (2006.01); **B21D 53/88** (2006.01); **C21D 9/00** (2006.01); **C21D 9/46** (2006.01); **C22C 38/00** (2006.01); **C22C 38/14** (2006.01); **C22C 38/60** (2006.01)

CPC (source: EP US)

**B21D 22/02** (2013.01 - EP); **B21D 22/208** (2013.01 - EP US); **B21J 1/06** (2013.01 - US); **B21K 7/12** (2013.01 - US); **C21D 1/673** (2013.01 - EP US); **C21D 8/0226** (2013.01 - EP US); **C21D 9/46** (2013.01 - EP US); **C22C 38/00** (2013.01 - EP US); **C22C 38/001** (2013.01 - EP US); **C22C 38/002** (2013.01 - EP US); **C22C 38/005** (2013.01 - EP US); **C22C 38/007** (2013.01 - EP US); **C22C 38/02** (2013.01 - EP US); **C22C 38/04** (2013.01 - EP US); **C22C 38/06** (2013.01 - EP US); **C22C 38/08** (2013.01 - EP US); **C22C 38/105** (2013.01 - EP US); **C22C 38/12** (2013.01 - EP US); **C22C 38/14** (2013.01 - EP US); **C22C 38/20** (2013.01 - EP US); **C22C 38/24** (2013.01 - EP US); **C22C 38/28** (2013.01 - EP US); **C22C 38/44** (2013.01 - EP US); **C22C 38/50** (2013.01 - EP US); **C22C 38/60** (2013.01 - EP US); **C23C 2/06** (2013.01 - EP US); **C23C 2/28** (2013.01 - EP US); **C23C 2/29** (2022.08 - EP US); **B21D 53/88** (2013.01 - EP US); **C21D 2211/004** (2013.01 - EP US); **C21D 2211/005** (2013.01 - EP US)

Citation (search report)

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- [XI] US 2005257862 A1 20051124 - ASA TATSUYA [JP], et al
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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

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DOCDB simple family (application)

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