

Title (en)

METHOD FOR MANUFACTURING HOT PRESS FORMING PART AND HOT PRESS FORMING PART

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES HEISSPRESSFORMTEILS UND HEISSPRESSFORMTEIL

Title (fr)

PROCÉDÉ DE FABRICATION D'UN ARTICLE MOULÉ À LA PRESSE À CHAUD ET ARTICLE MOULÉ À LA PRESSE À CHAUD

Publication

EP 3135394 A4 20170426 (EN)

Application

EP 15783938 A 20150226

Priority

- JP 2014088848 A 20140423
- JP 2014179073 A 20140903
- JP 2015056439 W 20150226

Abstract (en)

[origin: EP3135394A1] In manufacturing a hot press forming part by hot pressing, using a tool of press forming, a coated steel sheet that is obtained by forming a Zn-Ni coating layer on a surface of a steel sheet, the tool of press forming having a die, a blank holder, and a punch, edges of the coated steel sheet heated to a temperature range of Ac 3 transformation temperature to 1000 °C are cooled with the edges squeezed between the die and the blank holder to a temperature of 550 °C or lower and 400 °C or higher at a cooling rate of 100 °C/s or higher, press forming is performed so that the press forming is started when the edges reach a temperature of 550 °C or lower and 400 °C or higher, and after the press forming, a formed body is quenched with the formed body held at the press bottom dead center while being squeezed by the tool of press forming.

IPC 8 full level

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CPC (source: EP KR US)

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Citation (search report)

- [XA] EP 2602359 A1 20130612 - JFE STEEL CORP [JP]
- [XA] EP 2684985 A1 20140115 - JFE STEEL CORP [JP]
- [XA] WO 2013133137 A1 20130912 - KOBE STEEL LTD [JP]
- [A] JP 2009082992 A 20090423 - NIPPON STEEL CORP
- See references of WO 2015163016A1

Cited by

EP3181717A4; EP3199257A4; US10207306B2; WO2019104601A1

Designated contracting state (EPC)

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Designated extension state (EPC)

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