Title (en)

HOT PRESSED STEEL SHEET COMPONENT AND METHOD FOR PRODUCING THE SAME

Title (de)

HEISSGEPRESSTES STAHLBLECHELEMENT UND VERFAHREN ZUR HERSTELLUNG DAVON

Title (fr)

ÉLÉMENT DE FEUILLE D'ACIER PRESSÉE À CHAUD ET SON PROCÉDÉ DE PRODUCTION

Publication

EP 3075872 A1 20161005 (EN)

Application

EP 14865643 A 20141128

Priority

- JP 2013247814 A 20131129
- JP 2014081514 W 20141128

Abstract (en)

A hot formed steel sheet component including: a chemical composition including in terms of mass% C at from 0.100% to 0.340%, Si at from 0.50% to 2.00%, Mn at from 1.00% to 3.00%, P at 0.050% or less, S at 0.0100% or less, sol. Al at from 0.001% to 1.000%, and N at 0.0100% or less, with a remainder consisting of Fe and impurities; and a steel structure including ferrite, at least one of tempered martensite or tempered bainite, and martensite, wherein an area rate of ferrite is from 5% to 50%, a total area rate of tempered martensite and tempered bainite is from 20% to 70%, an area rate of martensite is from 25% to 75%, a total area rate of ferrite, tempered martensite, tempered bainite and martensite is 90% or more, and an area rate of retained austenite is from 0% to 5%.

IPC 8 full level

B21D 22/02 (2006.01); **B21D 22/20** (2006.01); **B21D 35/00** (2006.01); **C21D 1/18** (2006.01); **C21D 8/02** (2006.01); **C21D 8/04** (2006.01); **C21D 9/00** (2006.01); **C21D 9/46** (2006.01); **C22C 38/00** (2006.01); **C22C 38/02** (2006.01); **C22C 38/04** (2006.01); **C22C 38/06** (2006.01); **C22C 38/08** (2006.01); **C22C 38/12** (2006.01); **C22C 38/14** (2006.01); **C22C 38/16** (2006.01); **C22C 38/18** (2006.01); **C22C 38/38** (2006.01); **C22C 38/58** (2006.01)

CPC (source: EP KR RU US)

B21D 22/022 (2013.01 - EP KR US); **B21D 22/20** (2013.01 - KR RU); **C21D 1/18** (2013.01 - KR RU US); **C21D 8/0221** (2013.01 - EP US); **C21D 8/0436** (2013.01 - EP US); **C21D 8/0447** (2013.01 - EP US); **C21D 9/46** (2013.01 - EP KR RU US); **C22C 38/00** (2013.01 - EP KR US); **C22C 38/001** (2013.01 - EP KR US); **C22C 38/002** (2013.01 - EP KR US); **C22C 38/005** (2013.01 - EP KR US); **C22C 38/02** (2013.01 - EP KR US); **C22C 38/04** (2013.01 - EP KR RU US); **C22C 38/06** (2013.01 - EP KR RU US); **C22C 38/08** (2013.01 - EP US); **C22C 38/12** (2013.01 - EP US); **C22C 38/14** (2013.01 - EP US); **C22C 38/16** (2013.01 - EP US); **C22C 38/18** (2013.01 - EP US); **C22C 38/38** (2013.01 - EP US); B21D 35/005 (2013.01 - EP US); C21D 2211/002 (2013.01 - EP US); C21D 2211/005 (2013.01 - EP US); C21D 2211/008 (2013.01 - EP US)

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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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3075872 A1 20161005; **EP 3075872 A4 20170503**; CA 2931494 A1 20150604; CA 2931494 C 20191231; CN 105793455 A 20160720; CN 105793455 B 20181012; JP 2018119214 A 20180802; JP 6341214 B2 20180613; JP WO2015080242 A1 20170316; KR 101814949 B1 20180104; KR 20160090865 A 20160801; KR 20180001590 A 20180104; MX 2016006777 A 20160907; RU 2625374 C1 20170713; TW 201529867 A 20150801; TW I544091 B 20160801; US 2017029914 A1 20170202; WO 2015080242 A1 20150604

DOCDB simple family (application)

EP 14865643 A 20141128; CA 2931494 A 20141128; CN 201480063861 A 20141128; JP 2014081514 W 20141128; JP 2015551009 A 20141128; JP 2018044684 A 20180312; KR 20167016945 A 20141128; KR 20177037252 A 20141128; MX 2016006777 A 20141128; RU 2016125232 A 20141128; TW 103141409 A 20141128; US 201415039339 A 20141128