

Title (en)
HEAT TREATMENT METHOD FOR AHSS HOT ROLLED COILS, AND COLD ROLLING METHOD USING SAME AND HEAT TREATMENT APPARATUS

Title (de)
WÄRMEBEHANDLUNGSVERFAHREN FÜR WARMGEWALZTE AHSS-SPULEN SOWIE KALTWALZVERFAHREN DAMIT UND WÄRMEBEHANDLUNGSVORRICHTUNG

Title (fr)
PROCÉDÉ DE TRAITEMENT THERMIQUE DE BOBINES LAMINÉES À CHAUD EN ACIER AVANCÉ À HAUTE RÉSISTANCE, ET PROCÉDÉ DE LAMINAGE À FROID LE METTANT EN UVRE ET APPAREIL DE TRAITEMENT THERMIQUE

Publication
EP 3231523 A1 20171018 (EN)

Application
EP 15867452 A 20151030

Priority
• KR 20140175568 A 20141209
• KR 20140177699 A 20141210
• KR 20150080524 A 20150608
• KR 2015011554 W 20151030

Abstract (en)
Disclosed herein are a hot coil of an advanced high strength steel (AHSS), a cold rolling method and a heat treatment apparatus using the same. A heat treatment method of a hot coil of an advanced high strength steel (AHSS) includes performing a hot rolling on a rolled material, cooling and winding the rolled material, forming the hot coil, performing a first cooling on the hot coil to a temperature at which a phase transformation is completed such that a hard phase is generated at an edge portion of the hot coil, heating only the edge portion of the hot coil and increasing a temperature of the edge portion of the hot coil to a tempering temperature, maintaining the tempering temperature for a predetermined time, weakening a strength of the edge portion of the hot coil such that the edge portion of the hot coil which was processed in the performing of the first cooling has a strength similar to that of a central portion of the hot coil and performing a second cooling of the hot coil which was processed in the weakening of the strength of the hot coil edge.

IPC 8 full level
B21B 37/74 (2006.01); **B21B 45/00** (2006.01); **B21B 45/02** (2006.01); **B21C 47/26** (2006.01); **C21D 1/08** (2006.01); **C21D 9/56** (2006.01)

CPC (source: CN EP)
B21B 37/74 (2013.01 - CN); **B21B 45/0203** (2013.01 - CN); **B21C 47/26** (2013.01 - EP); **C21D 1/25** (2013.01 - EP); **C21D 1/767** (2013.01 - EP); **C21D 8/0205** (2013.01 - EP); **C21D 9/0006** (2013.01 - EP); **C21D 9/0056** (2013.01 - EP); **C21D 9/46** (2013.01 - EP); **C21D 9/562** (2013.01 - CN); **C21D 11/00** (2013.01 - EP); **C21D 2221/02** (2013.01 - EP); **C21D 2221/10** (2013.01 - EP)

Cited by
DE102021208782A1; WO2023016965A1

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 3231523 A1 20171018; **EP 3231523 A4 20180509**; CN 105934288 A 20160907; CN 105934288 B 20191224; JP 2017512651 A 20170525; JP 6229066 B2 20171108; WO 2016093493 A1 20160616

DOCDB simple family (application)
EP 15867452 A 20151030; CN 201580004858 A 20151030; JP 2016544449 A 20151030; KR 2015011554 W 20151030