

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  
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Application  
**EP 15867452 A 20151030**

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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  
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Cited by  
DE102021208782A1; WO2023016965A1

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