Title (en)

METHOD OF MAKING HIGH STRENGTH FERROUS ARTICLE, AND ARTICLE MADE THEREBY

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES HOCHFESTEN EISENARTIKELS UND DAMIT HERGESTELLTER EISENARTIKEL

Title (fr)

PROCEDE DE FABRICATION D'UN ARTICLE FERREUX HAUTE RESISTANCE ET ARTICLE ASSOCIE

Publication

EP 1797205 A2 20070620 (EN)

Application

EP 05858151 A 20050919

Priority

- US 2005033336 W 20050919
- US 61072004 P 20040917
- US 22735405 A 20050915

Abstract (en)

[origin: US2006060268A1] A bainite phase is formed in a body of a ferrous alloy by heating the workpiece to a temperature above an austenizing temperature of the alloy and thereafter contacting the workpiece with a quenching medium. Heat is input to the workpiece during at least a portion of the time it is in contact with the quenching medium. The quenching medium and/or the source of heat are regulated so that they work in combination to maintain the workpiece at a holding temperature which is no more than 350° C. but above the temperature at which the martensite phase forms in the alloy. After maintaining the alloy at the holding temperature for a predetermined period of time, it is cooled to ambient. Also disclosed are systems for implementing the method.

IPC 8 full level

A61F 2/02 (2006.01)

CPC (source: EP KR US)

C21D 1/20 (2013.01 - KR); **C21D 1/56** (2013.01 - EP US); **C21D 11/005** (2013.01 - EP US); C21D 2211/002 (2013.01 - EP US)

Citation (search report)

See references of WO 2007001374A2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

US 2006060268 A1 20060323; BR PI0515674 A 20080729; EP 1797205 A2 20070620; JP 2008519154 A 20080605; KR 20070099539 A 20071009; US 2008053579 A1 20080306; WO 2007001374 A2 20070104; WO 2007001374 A3 20080821

DOCDB simple family (application)

US 22735405 A 20050915; BR PI0515674 A 20050919; EP 05858151 A 20050919; JP 2007532551 A 20050919; KR 20077007958 A 20070406; US 2005033336 W 20050919; US 57534305 A 20050919