

Title (en)

WARM FORMING ADVANCED HIGH STRENGTH STEEL

Title (de)

WARMFORMEN VON FORTSCHRITTLICHEM HOCHFESTEM STAHL

Title (fr)

FORMAGE À CHAUD D'ACIER PERFECTIONNÉ HAUTE RÉSISTANCE

Publication

**EP 2984199 A1 20160217 (EN)**

Application

**EP 14883195 A 20140224**

Priority

US 2014018053 W 20140224

Abstract (en)

[origin: WO2015126424A1] Metallic alloys are disclosed containing Fe at 48.0 to 81.0 atomic percent, B at 2.0 to 8.0 atomic percent, Si at 4.0 to 14.0 atomic percent, and at least one or more of Cu, Mn or Ni, wherein the Cu is present at 0.1 to 6.0 atomic percent, Mn is present at 0.1 to 21.0 atomic percent and Ni is present at 0.1 to 16.0 atomic percent. The alloys may be heated at temperatures of 200 C to 850 C for a time period of up to 1 hour and upon cooling there is no eutectoid transformation. The alloys may then be formed into a selected shape.

IPC 8 full level

**C22C 38/18** (2006.01); **C21D 6/00** (2006.01); **C21D 6/02** (2006.01); **C22C 38/04** (2006.01); **C22C 38/06** (2006.01); **C22C 38/32** (2006.01); **C22C 38/34** (2006.01); **C22C 38/42** (2006.01); **C22C 38/44** (2006.01); **C22C 38/46** (2006.01); **C22C 38/50** (2006.01); **C22C 38/54** (2006.01); **C22C 38/58** (2006.01)

CPC (source: EP)

**C21D 6/004** (2013.01); **C21D 6/005** (2013.01); **C21D 6/008** (2013.01); **C21D 6/02** (2013.01); **C22C 38/04** (2013.01); **C22C 38/06** (2013.01); **C22C 38/34** (2013.01); **C22C 38/42** (2013.01); **C22C 38/44** (2013.01); **C22C 38/46** (2013.01); **C22C 38/50** (2013.01); **C22C 38/54** (2013.01); **C22C 38/58** (2013.01); **C21D 2211/004** (2013.01)

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)

**WO 2015126424 A1 20150827**; EP 2984199 A1 20160217; EP 2984199 A4 20161214; JP 2017509802 A 20170406

DOCDB simple family (application)

**US 2014018053 W 20140224**; EP 14883195 A 20140224; JP 2016570759 A 20140224