

Title (en)

RETENTION OF MECHANICAL PROPERTIES IN STEEL ALLOYS AFTER PROCESSING AND IN THE PRESENCE OF STRESS CONCENTRATION SITES

Title (de)

ERHALTUNG DER MECHANISCHEN EIGENSCHAFTEN IN STAHLLEGIERUNGEN NACH DER VERARBEITUNG UND BEI VORHANDENSEIN VON SPANNUNGSKONZENTRATIONSTELLEN

Title (fr)

RÉTENTION DE PROPRIÉTÉS MÉCANIQUES DANS DES ALLIAGES D'ACIER APRÈS TRAITEMENT ET EN PRÉSENCE DE SITES DE CONCENTRATION DE CONTRAINTES

Publication

**EP 3645763 A1 20200506 (EN)**

Application

**EP 18824168 A 20180628**

Priority

- US 201762527400 P 20170630
- US 2018039958 W 20180628

Abstract (en)

[origin: US2019003003A1] This invention is related to retention of mechanical properties in high strength steel at reduced thicknesses and which mechanical property performance is also retained at relatively high strain rates. These new steels can offer advantages for a myriad of applications where reduced sheet thickness is desirable. In addition, the alloys herein are those that retain useful mechanical properties after introduction of a geometric discontinuity and an accompanying stress concentration.

IPC 8 full level

**C22C 38/02** (2006.01); **C22C 38/04** (2006.01); **C22C 38/08** (2006.01); **C22C 38/20** (2006.01); **C22C 38/34** (2006.01); **C22C 38/40** (2006.01)

CPC (source: EP US)

**B21B 1/22** (2013.01 - US); **B21B 3/00** (2013.01 - US); **C21D 6/004** (2013.01 - EP US); **C21D 6/005** (2013.01 - EP US); **C21D 6/008** (2013.01 - EP US); **C21D 8/0205** (2013.01 - EP US); **C21D 8/0226** (2013.01 - EP US); **C21D 9/46** (2013.01 - EP US); **C22C 38/02** (2013.01 - EP); **C22C 38/04** (2013.01 - EP); **C22C 38/34** (2013.01 - EP US); **C22C 38/42** (2013.01 - EP US); **C22C 38/58** (2013.01 - EP US); **B21B 2001/225** (2013.01 - US)

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)

**US 2019003003 A1 20190103**; CA 3068303 A1 20190103; EP 3645763 A1 20200506; EP 3645763 A4 20210421; EP 3971313 A1 20220323; EP 3971314 A1 20220323; JP 2020526666 A 20200831; WO 2019006095 A1 20190103

DOCDB simple family (application)

**US 201816021251 A 20180628**; CA 3068303 A 20180628; EP 18824168 A 20180628; EP 21206699 A 20180628; EP 21206702 A 20180628; JP 2020500195 A 20180628; US 2018039958 W 20180628