

Title (en)
WEAR RESISTANT AUSTENITIC STEEL HAVING SUPERIOR MACHINABILITY AND DUCTILITY METHOD FOR PRODUCING SAME

Title (de)
VERSCHLEISSFESTER AUSTENITISCHER STAHL MIT AUSGEZEICHNETER BEARBEITBARKEIT UND DUKTILITÄT SOWIE HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)
ACIER AUSTÉNITIQUE RÉSISTANT À L'USURE ET PRÉSENTANT UNE USINABILITÉ ET UNE DUCTILITÉ AMÉLIORÉES, ET PROCÉDÉ DE PRODUCTION CORRESPONDANT

Publication
EP 2799582 A4 20160224 (EN)

Application
EP 12862562 A 20121227

Priority

- KR 20110145213 A 20111228
- KR 20120151507 A 20121221
- KR 2012011536 W 20121227

Abstract (en)
[origin: EP2799582A1] Provided are a wear resistant austenitic steel having superior machinability and ductility and a method for producing same, the austenitic steel comprising, in weight %, 8 to 15% of manganese (Mn), carbon (C) that satisfies the relationship of $23\% < 33.5C-Mn \leq 37\%$, copper (Cu) that satisfies $1.6C-1.4(\%) \leq Cu \leq 5\%$, 0.03 to 0.1% of sulfur (S), 0.001 to 0.01% of calcium (Ca), the remainder being Fe and other inevitable impurities. According to the present invention, austenitic steel having superior machinability is provided in which the generation of carbide in the steel is inhibited in order to prevent degradation of the steel, and corrosion resistance is sufficiently ensured to enable the steel to be used with a long service life in a corrosive environment.

IPC 8 full level
C22C 38/00 (2006.01); **C21D 6/00** (2006.01); **C21D 8/02** (2006.01); **C21D 9/46** (2006.01); **C22C 38/04** (2006.01); **C22C 38/16** (2006.01); **C22C 38/20** (2006.01); **C22C 38/38** (2006.01); **C22C 38/60** (2006.01)

CPC (source: EP US)
B21B 1/026 (2013.01 - US); **C21D 6/005** (2013.01 - EP US); **C21D 8/0263** (2013.01 - EP US); **C21D 9/46** (2013.01 - EP US); **C22C 38/00** (2013.01 - EP US); **C22C 38/002** (2013.01 - EP US); **C22C 38/04** (2013.01 - EP US); **C22C 38/16** (2013.01 - EP US); **C22C 38/20** (2013.01 - EP US); **C22C 38/36** (2013.01 - US); **C22C 38/38** (2013.01 - EP US); **C22C 38/60** (2013.01 - EP US)

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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

DOCDB simple family (publication)
EP 2799582 A1 20141105; EP 2799582 A4 20160224; EP 2799582 B1 20190619; CN 104204262 A 20141210; CN 104204262 B 20180202; JP 2015507700 A 20150312; JP 6014682 B2 20161025; US 2014356220 A1 20141204; WO 2013100613 A1 20130704

DOCDB simple family (application)
EP 12862562 A 20121227; CN 201280070858 A 20121227; JP 2014550002 A 20121227; KR 2012011536 W 20121227; US 201214368897 A 20121227