

Title (en)

A paramagnetic, corrosion resistant austenitic steel with high elasticity, strength and toughness and a process for its manufacture

Title (de)

Ein paramagnetischer, korrosionsbeständiger, austenitischer Stahl mit hoher Dehngrenze, Festigkeit und Zähigkeit, und Verfahren zu seiner Herstellung

Title (fr)

Acier austenitique, paramagnetique, résistant à la corrosion et possédant une élasticité, une résistance mécanique et une ténacité élevées, ainsi que son procédé de fabrication

Publication

**EP 1069202 B1 20021211 (DE)**

Application

**EP 00890207 A 20000629**

Priority

AT 123299 A 19990715

Abstract (en)

[origin: EP1069202A1] Production of components made of an alloy containing (in wt.%) maximum 0.1 degrees C, 0.21-0.6 silicon, 17.0-24.0 chromium, more than 20 but less than 30 manganese, more than 0.6 but less than 1.4 nitrogen, up to 2.5 nickel, up to 1.9 molybdenum, maximum 0.3 copper, up to 0.002 boron, up to 0.8 group IV and V element, and a balance of iron comprises melting the alloy, casting under atmospheric pressure, deforming at more than 850 degrees C and rapidly cooling, followed by further deforming at less than 600 degrees C and allowing to cool.

IPC 1-7

**C22C 38/38**; **C22C 38/04**; **C22C 38/58**; **C21D 8/12**

IPC 8 full level

**C21D 6/00** (2006.01); **C21D 8/12** (2006.01); **C22C 38/00** (2006.01); **C22C 38/44** (2006.01); **C22C 38/58** (2006.01)

CPC (source: EP US)

**C21D 6/002** (2013.01 - EP US); **C21D 8/1222** (2013.01 - EP US); **C21D 8/1227** (2013.01 - EP US); **C22C 38/001** (2013.01 - EP US); **C22C 38/44** (2013.01 - EP US); **C22C 38/58** (2013.01 - EP US)

Cited by

US6454879B1; EP2924131A1; WO2015144896A3; DE102018133251A1; WO2020127786A1; DE102018133255A1; WO2020127788A1; WO2020127789A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

**EP 1069202 A1 20010117**; **EP 1069202 B1 20021211**; AT 407882 B 20010725; AT A123299 A 20001115; AT E229575 T1 20021215; CA 2313975 A1 20010115; CA 2313975 C 20050628; DE 50000903 D1 20030123; ES 2187434 T3 20030616; US 6454879 B1 20020924

DOCDB simple family (application)

**EP 00890207 A 20000629**; AT 00890207 T 20000629; AT 123299 A 19990715; CA 2313975 A 20000714; DE 50000903 T 20000629; ES 00890207 T 20000629; US 61754100 A 20000714