

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

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