

Title (en)

Nitrogen-containing martensitic steel with low carbon content and process for its manufacture

Title (de)

Stickstoff enthaltendes martensitisches Stahl mit niedrigem Kohlenstoffgehalt und Verfahren zur Herstellung

Title (fr)

Acier martensitique à l'azote à faible teneur en carbone et son procédé de fabrication

Publication

**EP 0638658 B1 19980930 (FR)**

Application

**EP 94401751 A 19940729**

Priority

FR 9309858 A 19930811

Abstract (en)

[origin: EP0638658A1] Martensitic stainless steel including: a - from 0.5 to 0.85 % by weight of carbon + nitrogen b - from 0.15 to 0.24 % by weight of nitrogen c - from 0 to 0.50 % by weight of silicon d - from 0 to 0.70 % by weight of manganese e - from 0 to 0.50 % by weight of nickel f - from 14 to 17 % by weight of chromium g - from 1 to 2.5 % by weight of molybdenum h - from 0.10 to 0.70 % by weight of vanadium, the remaining fraction consisting of iron and of residues and the respective contents of each of these elements being determined so as to restrict the residual austenite content to a value lower than 10 % by volume.

IPC 1-7

**C22C 38/22**; **C22C 38/24**; **C22C 38/00**

IPC 8 full level

**C22C 38/00** (2006.01); **C22C 38/22** (2006.01); **C22C 38/24** (2006.01)

CPC (source: EP)

**C22C 38/001** (2013.01); **C22C 38/22** (2013.01); **C22C 38/24** (2013.01)

Cited by

EP0710731A3; EP1201775A1; EP0721995A3; CN1068073C; EP2159295A3; EP1304393A4; EP1626097A1; EP1238118A4; EP0694622A1; CN107567507A; DE102004051629A1; DE102004051629B4; CN115109891A; JP2019196530A; US7181847B2; US8591673B2; US11560613B2; JP2007530784A; CN100463996C; DE19924515A1; AU2005226606B2; WO2006045383A1; WO2019216145A1; WO2005093112A1; WO2016146857A1; WO2016174500A1

Designated contracting state (EPC)

AT BE DE DK ES GB GR IE IT LU NL PT SE

DOCDB simple family (publication)

**EP 0638658 A1 19950215**; **EP 0638658 B1 19980930**; AT E171731 T1 19981015; DE 69413632 D1 19981105; DE 69413632 T2 19990512; DK 0638658 T3 19990621; ES 2123735 T3 19990116; FR 2708939 A1 19950217; FR 2708939 B1 19951103

DOCDB simple family (application)

**EP 94401751 A 19940729**; AT 94401751 T 19940729; DE 69413632 T 19940729; DK 94401751 T 19940729; ES 94401751 T 19940729; FR 9309858 A 19930811