

Title (en)

USE OF A CHROMIUM STEEL HAVING A MARTENSITIC MICROSTRUCTURE AND CARBIDIC INCLUSIONS

Title (de)

"VERWENDUNG EINES CHROMSTAHLS MIT MARTENSITISCHEM GEFÜGE UND KARBIDISCHEN EINSCHLÜSSEN"

Title (fr)

UTILISATION D'UN ACIER CHROMÉ À STRUCTURE MARTENSITIQUE ET INCLUSIONS DE CARBURE

Publication

EP 2678459 B1 20150812 (DE)

Application

EP 12709281 A 20120224

Priority

- DE 102011012335 A 20110224
- DE 102011102293 A 20110523
- EP 2012000809 W 20120224

Abstract (en)

[origin: WO2012113569A1] Use of a martensitic, in particular cobalt-free, chromium steel having carbide inclusions having a particle size of not more than 15 µm, which is composed of from 0.50 to 0.78% of carbon, from 0.20 to 1.30% of silicon, from 0.15 to 0.80% of nickel, from 0.30 to 1.00% of manganese, from 0.01 to 0.035% of sulphur, from 16 to 18% of chromium, from 1.25 to 1.50% of molybdenum, from 0.001 to 0.8% of tungsten, from 0.04 to 0.08% of nitrogen, from 0.15 to 0.20% of vanadium, from 0.001 to 0.04% of titanium, from 0.001 to 0.04% of niobium, from 0.001 to 0.03% of aluminium, from 0.02 to 0.5% of copper, from 0.001 to 0.04% of boron, balance iron including smelting-related impurities as pit corrosion- and frictional wear-resistant material for the food and luxuries industry and for surgical instruments.

IPC 8 full level

C22C 38/22 (2006.01)

CPC (source: EP)

C22C 38/22 (2013.01)

Cited by

WO2018197554A1

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)

DE 102011102293 A1 20120830; EP 2678459 A1 20140101; EP 2678459 B1 20150812; ES 2547735 T3 20151008; TW 201245469 A 20121116; TW I529254 B 20160411; WO 2012113569 A1 20120830

DOCDB simple family (application)

DE 102011102293 A 20110523; EP 12709281 A 20120224; EP 2012000809 W 20120224; ES 12709281 T 20120224; TW 101105411 A 20120220