

Title (en)

Stainless austenitic steel with low nickel content

Title (de)

Rostfreier austenitischer Stahl mit niedrigem Nickelgehalt

Title (fr)

Acier inoxydable austénitique à basse teneur en nickel

Publication

EP 0969113 A1 20000105 (FR)

Application

EP 99401490 A 19990617

Priority

FR 9808427 A 19980702

Abstract (en)

The steel contains (in wt.%): 0.01-0.08 carbon, 0.1-1 silicon, 5-11 manganese, 15-17.5 chromium, 1-4 nickel, 1-4 copper, 1 x 10<-4>-20 x 10<-4> sulfur, 1 x 10<-4>-50 x 10<-4> calcium, 0-0.003 aluminum, 0.005-0.1 phosphorus, 5 x 10<-4> boron, 0.01 oxygen, and iron and unavoidable impurities the remainder. Preferably, the steel contains (in wt.%): 0.01-0.05 carbon, 0.1-1 silicon, 5-11 manganese, 15-17.5 chromium, 1-2 nickel, 2-4 copper, 1 x 10<-4>-10 x 10<-4> sulfur, 1 x 10<-4>-10 x 10<-4> calcium, 0-0.001 aluminum, 0.005-0.1 phosphorus, less than 0.01 oxygen, and iron and unavoidable impurities the remainder. The steel may also include 0.01-2% Mo.

Abstract (fr)

Acier inoxydable austénitique comportant une basse teneur en nickel et résistant à la corrosion présentant la composition suivante en pourcentages pondéraux: 0,01% < carbone < 0,08%, 0,1 % < silicium < 1%, 5% < manganèse < 11%, 15% < chrome < 17,5%, 1% < nickel < 4%, 1% < cuivre < 4%, 1.10<-4>% < soufre < 20.10<-4>%, 1.10<-4>% < calcium < 50.10<-4>%, 0% < aluminium < 0,03%, 0,005% < phosphore < 0,1%, bore < 5.10<-4>%, oxygène < 0,01%, le reste étant du fer et des impuretés résultant de l'élaboration.

IPC 1-7

C22C 38/58; C22C 38/42

IPC 8 full level

C22C 38/00 (2006.01); **C22C 38/42** (2006.01); **C22C 38/58** (2006.01)

CPC (source: EP KR US)

C22C 38/42 (2013.01 - EP KR US); **C22C 38/58** (2013.01 - EP US)

Citation (search report)

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Designated contracting state (EPC)

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

DOCDB simple family (publication)

EP 0969113 A1 20000105; EP 0969113 B1 20021106; AT E227355 T1 20021115; AU 3575799 A 20000120; AU 742519 B2 20020103; BR 9902524 A 20000314; CA 2274634 A1 20000102; CN 1091168 C 20020918; CN 1240839 A 20000112; DE 69903769 D1 20021212; FR 2780735 A1 20000107; FR 2780735 B1 20010622; ID 23569 A 20000504; JP 2000034546 A 20000202; KR 20000011411 A 20000225; TW 452600 B 20010901; US 6274084 B1 20010814; ZA 994321 B 20000110

DOCDB simple family (application)

EP 99401490 A 19990617; AT 99401490 T 19990617; AU 3575799 A 19990618; BR 9902524 A 19990701; CA 2274634 A 19990608; CN 99110134 A 19990702; DE 69903769 T 19990617; FR 9808427 A 19980702; ID 990638 A 19990701; JP 18912499 A 19990702; KR 19990026323 A 19990701; TW 88110284 A 19990621; US 34672399 A 19990702; ZA 994321 A 19990701