

Title (en)

LOW INTERSTITIAL, CORROSION RESISTANT, WELDABLE FERRITIC STAINLESS STEEL AND PROCESS FOR THE MANUFACTURE THEREOF

Publication

EP 0057316 B1 19850403 (EN)

Application

EP 81305667 A 19811202

Priority

US 22556681 A 19810116

Abstract (en)

[origin: EP0057316A1] A low interstitial, corrosion resistant, weldable ferritic stainless steel has an addition of between 0.05 and 0.50% by weight columbium and/or titanium to give the steel improved toughness when the maximum achievable cooling rate is limited. The steel consists of the following composition by weight percent: between 25.0 and 35% chromium, between 3.6 and 5.6% molybdenum, between 0.05 and 0.50% of columbium and/or titanium, less than 3.0% nickel, less than 2.0% manganese, less than 2.0% silicon, less than 0.5% aluminium, less than 0.5% copper, less than 0.050% phosphorous, less than 0.050% sulfur, less than 0.01% carbon, less than 0.02% nitrogen, the carbon plus nitrogen content being less than 0.025%, and the balance iron. A process is also disclosed which comprises air-cooling a steel having the above composition from the annealing temperature before cold rolling.

IPC 1-7

C22C 38/22; **C22C 38/26**; **C22C 38/28**

IPC 8 full level

C22C 38/00 (2006.01); **C22C 38/08** (2006.01); **C22C 38/22** (2006.01); **C22C 38/26** (2006.01); **C22C 38/28** (2006.01)

CPC (source: EP)

C22C 38/22 (2013.01); **C22C 38/26** (2013.01); **C22C 38/28** (2013.01)

Cited by

US5942184A; GB2193726A; GB2193726B; EP0388283A1; FR2644478A1; US5230752A; WO9010723A1

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)

EP 0057316 A1 19820811; **EP 0057316 B1 19850403**; AT E12527 T1 19850415; AU 7829481 A 19820722; BR 8200150 A 19821103; CA 1184403 A 19850326; DE 3169748 D1 19850509; ES 508364 A0 19830316; ES 8305049 A1 19830316; JP S57137455 A 19820825; KR 830007871 A 19831107; KR 880001356 B1 19880728; MX 156238 A 19880727

DOCDB simple family (application)

EP 81305667 A 19811202; AT 81305667 T 19811202; AU 7829481 A 19811204; BR 8200150 A 19820113; CA 391706 A 19811208; DE 3169748 T 19811202; ES 508364 A 19811228; JP 532482 A 19820116; KR 810004803 A 19811209; MX 19098182 A 19820114