

Title (en)

HIGHLY ANTICORROSIVE MARTENSITIC STAINLESS STEEL, AND MANUFACTURING METHOD THEREFOR

Title (de)

HOCHKORROSIONSBESTÄNDIGER MARTENSITISCHER ROSTFREIER STAHL UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

ACIER INOXYDABLE MARTENSITIQUE À HAUT POUVOIR ANTI-CORROSIF ET SON PROCÉDÉ DE FABRICATION

Publication

EP 4098765 A4 20240424 (EN)

Application

EP 20925160 A 20201014

Priority

- KR 20200034294 A 20200320
- KR 2020014029 W 20201014

Abstract (en)

[origin: EP4098765A1] Disclosed is a highly anticorrosive martensitic stainless steel having uniformly distributed fine chromium carbide so as to have improved corrosion resistance and being applicable as tableware with suitable hardness when strengthened by heat treatment, and a manufacturing method therefor. The highly anticorrosive martensitic stainless steel according to an embodiment of the present disclosure includes, in percent by weight (wt%), 0.14 to 0.21% of C, 0.05 to 0.11% of N, 0.1 to 0.6% of Si, 0.4 to 1.2% of Mn, 14.0 to 17.0% of Cr, 0.2 to 0.32% of C+N, and the balance of Fe and inevitable impurities, has a PREN value, represented by Formula (1), of 16 or more, and has a precipitation temperature of chromium carbide of 950°C or lower.

IPC 8 full level

C22C 38/18 (2006.01); **C21D 1/18** (2006.01); **C21D 1/25** (2006.01); **C21D 1/26** (2006.01); **C21D 1/78** (2006.01); **C21D 6/00** (2006.01); **C21D 6/02** (2006.01); **C21D 6/04** (2006.01); **C21D 8/02** (2006.01); **C21D 9/46** (2006.01); **C22C 38/00** (2006.01); **C22C 38/02** (2006.01); **C22C 38/04** (2006.01)

CPC (source: EP KR US)

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DOCDB simple family (application)

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