

## 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**

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## 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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## Citation (search report)

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- See also references of WO 2021187706A1

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## DOCDB simple family (application)

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