

Title (en)

FERRITE-BASED STAINLESS STEEL AND COMPONENT FOR EXHAUST GAS

Title (de)

FERRITBASIERTER EDELSTAHL UND KOMPONENTE FÜR ABGAS

Title (fr)

ACIER INOXYDABLE À BASE DE FERRITE ET COMPOSANT POUR GAZ D'ÉCHAPPEMENT

Publication

EP 4234770 A1 20230830 (EN)

Application

EP 21882927 A 20211022

Priority

- JP 2020178302 A 20201023
- JP 2021039115 W 20211022

Abstract (en)

This ferritic stainless steel has a predetermined chemical composition, at least one type of oxides of oxides containing 5 mass% or more of Al and oxides containing 5 mass% or more of Si are present on the surface, and, among the oxides present on the surface, the number of oxides having a diameter D of 0.1 µm or more and 2.0 µm or less is 10 or more per 93 µm², the diameter D being represented by D = (Dmax + Dmin)/2 where Dmax is the maximum diameter of the oxide on the surface and Dmin is the minimum diameter of the oxide on the surface.

IPC 8 full level

C25F 1/06 (2006.01); **C21D 9/46** (2006.01); **C22C 38/00** (2006.01); **C22C 38/50** (2006.01); **C22C 38/60** (2006.01); **C23G 1/08** (2006.01)

CPC (source: EP KR US)

C21D 1/74 (2013.01 - EP); **C21D 6/002** (2013.01 - EP); **C21D 8/0226** (2013.01 - EP US); **C21D 8/0236** (2013.01 - US);
C21D 8/0273 (2013.01 - EP US); **C21D 8/0278** (2013.01 - EP); **C21D 9/46** (2013.01 - EP KR); **C22C 38/001** (2013.01 - KR US);
C22C 38/002 (2013.01 - EP US); **C22C 38/004** (2013.01 - EP); **C22C 38/005** (2013.01 - EP); **C22C 38/008** (2013.01 - EP KR);
C22C 38/02 (2013.01 - EP US); **C22C 38/04** (2013.01 - EP US); **C22C 38/06** (2013.01 - EP US); **C22C 38/34** (2013.01 - EP KR);
C22C 38/42 (2013.01 - EP KR US); **C22C 38/44** (2013.01 - EP KR); **C22C 38/46** (2013.01 - EP KR); **C22C 38/48** (2013.01 - EP KR US);
C22C 38/50 (2013.01 - EP KR); **C22C 38/54** (2013.01 - EP); **C23C 8/02** (2013.01 - EP); **C23C 8/10** (2013.01 - EP); **C23C 8/16** (2013.01 - EP);
C23C 8/80 (2013.01 - EP); **C23C 10/08** (2013.01 - EP); **C23C 30/005** (2013.01 - KR); **C23G 1/08** (2013.01 - EP KR);
C23G 1/085 (2013.01 - EP US); **C23G 1/086** (2013.01 - EP US); **C25F 1/06** (2013.01 - EP KR US); **C21D 2211/005** (2013.01 - EP KR US)

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

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

EP 4234770 A1 20230830; CA 3195974 A1 20220428; CN 116323995 A 20230623; JP WO2022085788 A1 20220428;
KR 20230070270 A 20230522; MX 2023004503 A 20230510; US 2023383390 A1 20231130; WO 2022085788 A1 20220428

DOCDB simple family (application)

EP 21882927 A 20211022; CA 3195974 A 20211022; CN 202180071452 A 20211022; JP 2021039115 W 20211022;
JP 2022557621 A 20211022; KR 20237013155 A 20211022; MX 2023004503 A 20211022; US 202118032771 A 20211022