

Title (en)  
FERRITIC STAINLESS STEEL FOR EXHAUST SYSTEM MEMBER HAVING EXCELLENT CORROSION RESISTANCE AFTER HEATING

Title (de)  
FERRITISCHER EDELSTAHL FÜR ABGASSYSTEM MIT EXZELLENTER KORROSIONSBESTÄNDIGKEIT NACH ERWÄRMUNG

Title (fr)  
ACIER INOXYDABLE FERRITIQUE POUR ÉLÉMENT DE SYSTÈME D'ÉCHAPPEMENT PRÉSENTANT UNE EXCELLENTE RÉSISTANCE À LA CORROSION APRÈS CHAUFFAGE

Publication  
**EP 3249067 A4 20180704 (EN)**

Application  
**EP 16740065 A 20160115**

Priority  
• JP 2015007524 A 20150119  
• JP 2016051086 W 20160115

Abstract (en)  
[origin: EP3249067A1] A ferritic stainless steel for exhaust system components excellent in corrosion resistance after heating is provided. A ferritic stainless steel for exhaust system components excellent in corrosion resistance after heating includes: 0.015 mass% or less of C; 0.02 mass% or less of N; 0.03 mass% to 1.0 mass% of Si; 1.0 mass% of Mn; 0.04 mass% of P; 0.01 mass% of S; 10.5 mass% to 22.5 mass% of Cr; 0.02 mass% to 0.5 mass% of Sn; 0.003 mass% to 0.2 mass% of Al; one or both of 0.03 mass% to 0.35 mass% of Ti and 0.03 mass% to 0.6 mass% of Nb; and a remnant comprising Fe and inevitable impurities, wherein a grain size number on a surface of the ferritic stainless steel is 6 to 2 to 15 nm of a layer containing Sn at a concentration twice or more of Sn content in the base material is formed on the ferritic stainless steel.

IPC 8 full level  
**C22C 38/00** (2006.01); **C21D 6/00** (2006.01); **C21D 8/02** (2006.01); **C21D 9/46** (2006.01); **C22C 38/02** (2006.01); **C22C 38/04** (2006.01); **C22C 38/06** (2006.01); **C22C 38/20** (2006.01); **C22C 38/22** (2006.01); **C22C 38/24** (2006.01); **C22C 38/26** (2006.01); **C22C 38/28** (2006.01); **C22C 38/30** (2006.01); **C22C 38/32** (2006.01); **C22C 38/42** (2006.01); **C22C 38/44** (2006.01); **C22C 38/48** (2006.01); **C22C 38/50** (2006.01); **C22C 38/60** (2006.01)

CPC (source: EP KR US)  
**C21D 6/002** (2013.01 - EP US); **C21D 8/0205** (2013.01 - EP US); **C21D 8/0236** (2013.01 - EP US); **C21D 8/0273** (2013.01 - EP US); **C21D 9/46** (2013.01 - EP KR US); **C22C 38/001** (2013.01 - EP US); **C22C 38/002** (2013.01 - EP US); **C22C 38/004** (2013.01 - EP US); **C22C 38/005** (2013.01 - EP US); **C22C 38/008** (2013.01 - EP US); **C22C 38/02** (2013.01 - EP US); **C22C 38/04** (2013.01 - EP US); **C22C 38/06** (2013.01 - EP US); **C22C 38/20** (2013.01 - EP US); **C22C 38/22** (2013.01 - EP US); **C22C 38/24** (2013.01 - EP US); **C22C 38/26** (2013.01 - EP KR US); **C22C 38/28** (2013.01 - EP KR US); **C22C 38/30** (2013.01 - EP US); **C22C 38/32** (2013.01 - EP US); **C22C 38/42** (2013.01 - EP US); **C22C 38/44** (2013.01 - EP US); **C22C 38/48** (2013.01 - EP KR US); **C22C 38/50** (2013.01 - EP KR US); **C22C 38/60** (2013.01 - EP KR US); **C21D 2211/005** (2013.01 - EP KR US)

Citation (search report)  
• [X] JP 2013204059 A 20131007 - NIPPON STEEL & SUMIKIN SST  
• [X] EP 2617854 A1 20130724 - NIPPON STEEL & SUMIKIN SST [JP]  
• [X] EP 2557189 A1 20130213 - NIPPON STEEL & SUMIKIN SST [JP]  
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• [I] EP 2548988 A1 20130123 - NIPPON STEEL & SUMIKIN SST [JP]  
• See references of WO 2016117458A1

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

DOCDB simple family (publication)  
**EP 3249067 A1 20171129; EP 3249067 A4 20180704; EP 3249067 B1 20201111**; CN 107208213 A 20170926; CN 107208213 B 20190115; ES 2837114 T3 20210629; JP 6779790 B2 20201104; JP WO2016117458 A1 20171109; KR 20170101262 A 20170905; KR 20190092621 A 20190807; MX 2017009376 A 20171108; PL 3249067 T3 20210531; US 2018016655 A1 20180118; WO 2016117458 A1 20160728

DOCDB simple family (application)  
**EP 16740065 A 20160115**; CN 201680006170 A 20160115; ES 16740065 T 20160115; JP 2016051086 W 20160115; JP 2016570601 A 20160115; KR 20177020528 A 20160115; KR 20197022451 A 20160115; MX 2017009376 A 20160115; PL 16740065 T 20160115; US 201615544476 A 20160115