

Title (en)
FERRITIC STAINLESS STEEL HAVING EXCELLENT DUCTILITY AND METHOD FOR MANUFACTURING SAME

Title (de)
FERRITISCHER EDELSTAHL MIT HERVORRAGENDER DUKTILITÄT UND VERFAHREN ZUR HERSTELLUNG DAVON

Title (fr)
MATÉRIAU D'ACIER INOXYDABLE FERRITIQUE PRÉSENTANT UNE EXCELLENTE DUCTILITÉ ET SON PROCÉDÉ DE PRODUCTION

Publication
EP 3239335 A1 20171101 (EN)

Application
EP 15873411 A 20150430

Priority
• KR 20140190545 A 20141226
• KR 2015004410 W 20150430

Abstract (en)
Ferritic stainless steel having a high degree of ductility and a method for manufacturing the ferritic stainless steel are provided. The stainless steel according to one aspect of an embodiment of the present invention includes, by wt%, C: 0.005% to 0.1%, Si: 0.01 % to 2.0%, Mn: 0.01 % to 1.5%, P: 0.05% or less, S: 0.005% or less, Cr: 10% to 30%, Ti: 0.005% to 0.5%, Al: 0.01 % to 0.15%, N: 0.005% to 0.03%, and the balance of Fe and inevitable impurities, wherein the ferritic stainless steel includes 3.5 x 10⁶ or fewer particles of an independent Ti(CN) precipitate per square millimeter (mm²) of ferrite matrix.

IPC 8 full level
C22C 38/18 (2006.01); **B22D 27/04** (2006.01); **C21D 8/02** (2006.01); **C22C 38/28** (2006.01)

CPC (source: EP US)
B22D 11/002 (2013.01 - EP US); **B22D 27/04** (2013.01 - US); **C21D 6/002** (2013.01 - EP US); **C21D 6/005** (2013.01 - EP US); **C21D 6/008** (2013.01 - EP US); **C21D 8/0205** (2013.01 - EP US); **C21D 8/021** (2013.01 - EP US); **C21D 8/0226** (2013.01 - EP US); **C21D 8/0263** (2013.01 - EP US); **C21D 9/0081** (2013.01 - EP US); **C22C 38/00** (2013.01 - EP US); **C22C 38/001** (2013.01 - EP US); **C22C 38/002** (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 38/28** (2013.01 - EP US); **C21D 2211/004** (2013.01 - EP US); **C21D 2211/005** (2013.01 - EP US)

Cited by
EP3699312A4; US11718887B2

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

DOCDB simple family (publication)
EP 3239335 A1 20171101; **EP 3239335 A4 20171129**; **EP 3239335 B1 20191113**; CN 107109598 A 20170829; CN 107109598 B 20180914; ES 2767505 T3 20200617; JP 2018505308 A 20180222; JP 6605032 B2 20191113; KR 101553607 B1 20150917; US 2017283894 A1 20171005; WO 2016104883 A1 20160630; WO 2016104883 A8 20170119

DOCDB simple family (application)
EP 15873411 A 20150430; CN 201580071217 A 20150430; ES 15873411 T 20150430; JP 2017533577 A 20150430; KR 2015004410 W 20150430; KR 20150061378 A 20150430; US 201515529263 A 20150430