

Title (en)

AUSTENITIC STAINLESS STEEL AND METHOD FOR PRODUCING SAME

Title (de)

AUSTENITISCHER EDELSTAHL UND VERFAHREN ZUR HERSTELLUNG DAVON

Title (fr)

ACIER INOXYDABLE AUSTÉNITIQUE ET SON PROCÉDÉ DE PRODUCTION

Publication

**EP 3683324 A4 20210303 (EN)**

Application

**EP 18856267 A 20180911**

Priority

- JP 2017175651 A 20170913
- JP 2018033714 W 20180911

Abstract (en)

[origin: EP3683324A1] Provided are an austenitic stainless steel that has high strength and favorable shape retention properties after a heat treatment, and a production method thereof. One aspect of the present invention is the austenitic stainless steel wherein a component composition satisfies C: less than or equal to 0.12% by mass; Si: greater than or equal to 0.1% by mass and less than or equal to 1.0% by mass; Mn: greater than or equal to 0.1% by mass and less than or equal to 3.0% by mass; P: less than or equal to 0.05% by mass; S: less than or equal to 0.01% by mass; Cr: greater than or equal to 13.0% by mass and less than or equal to 22.0% by mass; Ni: greater than or equal to 4.0% by mass and less than or equal to 12.0% by mass; Cu: greater than or equal to 0.01% by mass and less than or equal to 0.50% by mass; Mo: less than or equal to 5.0% by mass; Al: less than or equal to 0.03% by mass; Nb: greater than or equal to 0.05% by mass and less than or equal to 0.30% by mass; N: greater than or equal to 0.10% by mass and less than or equal to 0.50% by mass; and a balance consisting of Fe and inevitable impurities, and a crystal grain size number is greater than or equal to 7.0.

IPC 8 full level

**C22C 38/42** (2006.01); **C21D 6/00** (2006.01); **C21D 6/02** (2006.01); **C21D 8/02** (2006.01); **C21D 8/10** (2006.01); **C21D 9/08** (2006.01); **C21D 9/46** (2006.01); **C22C 38/00** (2006.01); **C22C 38/02** (2006.01); **C22C 38/04** (2006.01); **C22C 38/06** (2006.01); **C22C 38/44** (2006.01); **C22C 38/48** (2006.01); **C22C 38/58** (2006.01)

CPC (source: EP KR US)

**C21D 1/26** (2013.01 - US); **C21D 6/00** (2013.01 - EP); **C21D 6/004** (2013.01 - EP US); **C21D 6/005** (2013.01 - EP US); **C21D 6/008** (2013.01 - US); **C21D 6/02** (2013.01 - EP); **C21D 8/005** (2013.01 - US); **C21D 8/02** (2013.01 - EP); **C21D 8/0205** (2013.01 - EP KR); **C21D 8/0236** (2013.01 - EP); **C21D 8/0247** (2013.01 - EP); **C21D 8/10** (2013.01 - EP); **C21D 8/105** (2013.01 - EP); **C21D 9/08** (2013.01 - EP); **C21D 9/46** (2013.01 - EP); **C22C 38/00** (2013.01 - EP); **C22C 38/001** (2013.01 - EP US); **C22C 38/002** (2013.01 - US); **C22C 38/02** (2013.01 - EP US); **C22C 38/04** (2013.01 - EP US); **C22C 38/06** (2013.01 - EP US); **C22C 38/42** (2013.01 - EP US); **C22C 38/44** (2013.01 - EP KR US); **C22C 38/48** (2013.01 - EP US); **C22C 38/58** (2013.01 - EP KR US); **C21D 2211/001** (2013.01 - US)

Citation (search report)

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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 3683324 A1 20200722; EP 3683324 A4 20210303;** CA 3075882 A1 20190321; CA 3075882 C 20230110; CN 111094611 A 20200501; JP 6777824 B2 20201028; JP WO2019054390 A1 20200716; KR 102342675 B1 20211223; KR 20200033903 A 20200330; US 2020277680 A1 20200903; WO 2019054390 A1 20190321

DOCDB simple family (application)

**EP 18856267 A 20180911;** CA 3075882 A 20180911; CN 201880053351 A 20180911; JP 2018033714 W 20180911; JP 2019542074 A 20180911; KR 20207004834 A 20180911; US 201816647312 A 20180911