

Title (en)

AUSTENITIC HEAT-RESISTANT ALLOY AND METHOD FOR MANUFACTURING SAME

Title (de)

AUSTENITISCHE WÄRMEBESTÄNDIGE LEGIERUNG UND VERFAHREN ZUR HERSTELLUNG DAVON

Title (fr)

ALLIAGE AUSTÉNITIQUE RÉSISTANT À LA CHALEUR ET PROCÉDÉ POUR LA FABRICATION DE CE DERNIER

Publication

EP 3401415 A4 20190807 (EN)

Application

EP 17735952 A 20170104

Priority

- JP 2016000375 A 20160105
- JP 2017000056 W 20170104

Abstract (en)

[origin: EP3401415A1] Provided is an austenitic heat resistant alloy having high creep strength and high toughness even in a high temperature environment. This austenitic heat resistant alloy has a chemical composition consisting of: in mass%, C: 0.03 to less than 0.25%, Si: 0.01 to 2.0%, Mn: not more than 2.0%, Cr: 10 to less than 30%, Ni: more than 25 to 45%, Al: more than 2.5 to less than 4.5%, Nb: 0.2 to 3.5%, N: not more than 0.025%, with the balance being Fe and impurities, wherein P and S in the impurities are respectively, P: not more than 0.04% and S: not more than 0.01%. In the structure, a total volume ratio of precipitates having a circle equivalent diameter of not less than 6 μm is not more than 5%.

IPC 8 full level

C21D 6/00 (2006.01); **C21D 6/02** (2006.01); **C21D 7/13** (2006.01); **C21D 8/00** (2006.01); **C21D 8/10** (2006.01); **C22C 19/05** (2006.01); **C22C 30/02** (2006.01); **C22C 38/00** (2006.01); **C22C 38/02** (2006.01); **C22C 38/04** (2006.01); **C22C 38/06** (2006.01); **C22C 38/42** (2006.01); **C22C 38/44** (2006.01); **C22C 38/48** (2006.01); **C22C 38/50** (2006.01); **C22C 38/54** (2006.01); **C22C 38/58** (2006.01); **C22F 1/00** (2006.01); **C22F 1/10** (2006.01)

CPC (source: EP KR US)

C21D 6/004 (2013.01 - EP US); **C21D 6/02** (2013.01 - EP US); **C21D 7/13** (2013.01 - EP US); **C21D 8/00** (2013.01 - EP US); **C21D 8/10** (2013.01 - EP US); **C22C 19/05** (2013.01 - EP KR US); **C22C 19/055** (2013.01 - US); **C22C 19/058** (2013.01 - US); **C22C 30/00** (2013.01 - EP); **C22C 30/02** (2013.01 - KR); **C22C 38/001** (2013.01 - EP US); **C22C 38/002** (2013.01 - EP US); **C22C 38/005** (2013.01 - EP KR US); **C22C 38/02** (2013.01 - EP KR US); **C22C 38/04** (2013.01 - EP KR US); **C22C 38/06** (2013.01 - EP KR 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 US); **C22C 38/54** (2013.01 - EP US); **C22F 1/00** (2013.01 - EP US); **C22F 1/10** (2013.01 - EP KR US); **C21D 2211/001** (2013.01 - EP KR US)

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DOCDB simple family (application)

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