

Title (en)  
NICKEL ALLOY HAVING GOOD RESISTANCE TO CORROSION AND HIGH TENSILE STRENGTH, AND METHOD FOR PRODUCING SEMI-FINISHED PRODUCTS

Title (de)  
NICKEL-LEGIERUNG MIT GUTER KORROSIONSBESTÄNDIGKEIT UND HOHER ZUGFESTIGKEIT SOWIE VERFAHREN ZUR HERSTELLUNG VON HALBZEUGEN

Title (fr)  
ALLIAGE DE NICKEL À BONNE RÉSISTANCE À LA CORROSION ET À RÉSISTANCE ÉLEVÉE À LA TRACTION ET PROCÉDÉ DE FABRICATION DE DEMI-PRODUITS

Publication  
**EP 3942084 A1 20220126 (DE)**

Application  
**EP 20717083 A 20200317**

Priority  
• DE 102019106776 A 20190318  
• DE 102020106433 A 20200310  
• DE 2020100210 W 20200317

Abstract (en)  
[origin: CA3133458A1] The invention relates to a nickel alloy comprising (in wt.%) Ni 50 - 55%, Cr 17 - 21%, Mo > 0 - 9%, W 0 - 9%, Nb 1 - 5.7%, Ta > 0 - 4.7%, Ti 0.1 - 3.0%, Al 0.4 - 4.0%, Co max. 3.0%, Mn max. 0.35%, Si max. 0.35%, Cu max. 0.23%, C 0.001 - 0.045%, S max. 0.01%, P 0.001 - 0.02%, B 0.001 - 0.01%, the remainder consisting of Fe and the conventional process-related impurities, wherein the following relations are provided: Nb + Ta 1 - 5.7% (1), Al + Ti > 1.2- 5% (2), Mo + W 3 - 9% (3), where Nb, Ta, Al and Ti are the concentration of the elements in question in wt.%.

IPC 8 full level  
**C22C 38/22** (2006.01); **B22F 1/05** (2022.01); **B22F 1/065** (2022.01); **B22F 9/08** (2006.01); **C22B 9/16** (2006.01); **C22B 9/18** (2006.01); **C22B 9/20** (2006.01); **C22C 1/02** (2006.01); **C22C 19/05** (2006.01); **C22C 38/26** (2006.01); **C22C 38/28** (2006.01); **C22C 38/32** (2006.01); **C22C 38/40** (2006.01); **C22F 1/10** (2006.01)

CPC (source: EP KR US)  
**B22F 1/05** (2022.01 - EP KR US); **B22F 1/065** (2022.01 - EP KR US); **B22F 9/082** (2013.01 - KR US); **B33Y 70/00** (2014.12 - EP KR); **C22B 9/18** (2013.01 - EP); **C22B 9/20** (2013.01 - EP); **C22C 1/02** (2013.01 - EP US); **C22C 1/023** (2013.01 - US); **C22C 1/0433** (2013.01 - EP); **C22C 19/05** (2013.01 - EP); **C22C 19/055** (2013.01 - EP KR); **C22C 19/056** (2013.01 - EP KR US); **C22F 1/10** (2013.01 - EP US); **B22F 9/082** (2013.01 - EP); **B22F 10/10** (2021.01 - EP KR US); **B22F 10/20** (2021.01 - EP KR US); **B22F 2009/0824** (2013.01 - EP KR); **B22F 2009/0844** (2013.01 - EP KR); **B22F 2201/11** (2013.01 - US); **B22F 2301/15** (2013.01 - US); **B22F 2304/10** (2013.01 - US); **B22F 2998/10** (2013.01 - EP KR); **B22F 2999/00** (2013.01 - EP); **Y02P 10/25** (2015.11 - EP)

C-Set (source: EP KR US)  
1. **B22F 2998/10 + B22F 9/082 + B22F 10/10 + B22F 10/20**  
2. **B22F 2999/00 + B22F 1/065 + C22C 1/0433 + B22F 9/082**

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)  
**DE 102020106433 A1 20200924**; BR 112021012882 A2 20211005; CA 3133458 A1 20200924; CN 113646458 A 20211112; CN 113646458 B 20221213; EP 3942084 A1 20220126; JP 2022526758 A 20220526; JP 7422781 B2 20240126; KR 20210129149 A 20211027; US 2022098704 A1 20220331; WO 2020187368 A1 20200924

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**DE 102020106433 A 20200310**; BR 112021012882 A 20200317; CA 3133458 A 20200317; CN 202080011211 A 20200317; DE 2020100210 W 20200317; EP 20717083 A 20200317; JP 2021556671 A 20200317; KR 20217030112 A 20200317; US 202017422069 A 20200317