Title (en)

NICKEL-BASED ALLOY FOR MANUFACTURING PIPELINE TUBES

Title (de)

NICKELBASISLEGIERUNG ZUR HERSTELLUNG VON ROHRLEITUNGSROHREN

Title (fr)

ALLIAGE A BASE DE NICKEL POUR LA FABRICATION DE TUBES DE PIPELINE

Publication

EP 4237188 A1 20230906 (FR)

Application

EP 20803941 A 20201030

Priority

IB 2020060223 W 20201030

Abstract (en)

[origin: WO2022090781A1] The invention relates to an alloy having the following composition by weight: 16.5% ≤ Cr ≤ 25.0%; 11.0% ≤ Mo ≤ 18.0%; 2.0% ≤ W ≤ 7.0%; Fe ≤ 1.0%; Mo+W ≤ - 0.5 x (Cr+Fe) + 30%; Mo+W ≥ - 0.5 x (Cr+Fe) + 25%; Ti+Ta ≤ 0.80%; 0.01% ≤ Si ≤ 0.75%; 0.01% ≤ Al ≤ 0.35%; 0.01% ≤ Mn ≤ 0.35%; Ca ≤ 0.005%; Mg ≤ 0.005%; Nb ≤ 0.01%; 0.001% ≤ C ≤ 0.05%; 0.001% ≤ N ≤ 0.05%; S ≤ 0.003%; P ≤ 0.005%; optionally 0.0010% ≤ rare earths ≤ 0.015%, the silicon content being less than or equal to 0.25% in the presence of rare earths in an amount between 0.0010% and 0.015%, the balance being nickel and inevitable impurities resulting from the processing, the nickel content being greater than or equal to 54%.

IPC 8 full level

B23K 35/02 (2006.01); **B21C 37/08** (2006.01); **B23K 20/12** (2006.01); **B23K 35/30** (2006.01); **B23K 35/368** (2006.01); **B32B 15/01** (2006.01); **C21D 9/08** (2006.01); **C21D 9/50** (2006.01); **C22C 19/05** (2006.01); **C22C 38/00** (2006.01); **C22C 38/04** (2006.01); **C22C 38/12** (2006.01); **C23C 26/00** (2006.01)

CPC (source: EP KR)

B22F 9/082 (2013.01 - KR); **B23K 9/0026** (2013.01 - EP); **B23K 9/025** (2013.01 - EP); **B23K 9/0253** (2013.01 - EP); **B23K 9/0282** (2013.01 - EP); **B23K 9/04** (2013.01 - EP); **B23K 9/173** (2013.01 - EP); **B23K 10/02** (2013.01 - EP); **B23K 10/027** (2013.01 - EP KR); **B23K 15/0086** (2013.01 - EP); **B23K 15/0093** (2013.01 - EP); **B23K 26/144** (2015.10 - EP); **B23K 26/1464** (2013.01 - EP); **B23K 26/342** (2015.10 - EP); **B23K 31/027** (2013.01 - EP); **B23K 35/0261** (2013.01 - EP KR); **B23K 35/3033** (2013.01 - EP KR); **B23K 35/368** (2013.01 - EP KR); **B32B 15/015** (2013.01 - EP); **B33Y 10/00** (2014.12 - KR); **C21D 9/08** (2013.01 - EP); **C21D 9/50** (2013.01 - EP); **C22C 19/055** (2013.01 - EP KR); **C22C 19/056** (2013.01 - EP KR); **C22C 38/00** (2013.01 - EP); **C22C 38/04** (2013.01 - EP); **C22C 38/12** (2013.01 - EP); **C23C 24/103** (2013.01 - EP); **C23C 30/00** (2013.01 - EP); B22F 2009/0836 (2013.01 - KR); B23K 2101/06 (2018.07 - EP); B23K 2101/10 (2018.07 - EP); B23K 2101/18 (2018.07 - EP); B23K 2103/04 (2018.07 - EP); C21D 2251/02 (2013.01 - EP)

Citation (search report)

See references of WO 2022090781A1

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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

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DOCDB simple family (application)

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