

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: $16.5\% \leq \text{Cr} \leq 25.0\%$; $11.0\% \leq \text{Mo} \leq 18.0\%$; $2.0\% \leq \text{W} \leq 7.0\%$; $\text{Fe} \leq 1.0\%$; $\text{Mo} + \text{W} \leq -0.5 \times (\text{Cr} + \text{Fe}) + 30\%$; $\text{Mo} + \text{W} \geq -0.5 \times (\text{Cr} + \text{Fe}) + 25\%$; $\text{Ti} + \text{Ta} \leq 0.80\%$; $0.01\% \leq \text{Si} \leq 0.75\%$; $0.01\% \leq \text{Al} \leq 0.35\%$; $0.01\% \leq \text{Mn} \leq 0.35\%$; $\text{Ca} \leq 0.005\%$; $\text{Mg} \leq 0.005\%$; $\text{Nb} \leq 0.01\%$; $0.001\% \leq \text{C} \leq 0.05\%$; $0.001\% \leq \text{N} \leq 0.05\%$; $\text{S} \leq 0.003\%$; $\text{P} \leq 0.005\%$; optionally $0.0010\% \leq \text{rare earths} \leq 0.015\%$, 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

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Designated extension state (EPC)
BA ME

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KH MA MD TN

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