

Title (en)
NEW AUSTENITIC ALLOY

Title (de)
NEUE AUSTENITISCHE LEGIERUNG

Title (fr)
NOUVEL ALLIAGE AUSTENITIQUE

Publication
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Application
EP 19724876 A 20190523

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Abstract (en)
[origin: WO2019224287A1] The invention relates to an austenitic alloy comprising the following elements in weight%: C \leq 0.03; Si \leq 1.0; 5 Mn \leq 1.5; S \leq 0.03; P \leq 0.03; Cr 25.0 to 33.0; Ni 42.0 to 52.0; 10 Mo 6.0 to 9.0; N 0.07 – 0.11; Cu \leq 0.4; Balance Fe and unavoidable impurities; and characterized in that the austenitic alloy fulfills the following condition: $ENi > 1.864 * ECr - 19.92$ wherein $ECr = [wt\%Cr] + [wt\%Mo] + 1.5 * [wt\%Si]$ and $ENi = [wt\%Ni] + 30 * [wt\%C] + 30 * [wt\%N] + 0.5 * [wt\%Mn] + 0.5 * [wt\%Cu]$. The invention also relates to a manufacturing method and an object comprising said alloy. The alloy and objects made thereof have less than 0.3 % intermetallic phases after solidification.

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