

Title (en)  
NEW AUSTENITIC ALLOY

Title (de)  
NEUE AUSTENITISCHE LEGIERUNG

Title (fr)  
NOUVEL ALLIAGE AUSTENITIQUE

Publication  
**EP 3797179 B1 20240117 (EN)**

Application  
**EP 19724876 A 20190523**

Priority  
• EP 18173865 A 20180523  
• EP 2019063297 W 20190523

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:  $ENi > 1.864 \cdot ECr - 19.92$  wherein  $ECr = [wt\%Cr] + [wt\%Mo] + 1.5 \cdot [wt\%Si]$  and  $ENi = [wt\%Ni] + 30 \cdot [wt\%C] + 30 \cdot [wt\%N] + 0.5 \cdot [wt\%Mn] + 0.5 \cdot [wt\%Cu]$ . 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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