

Title (en)  
MARTENSITIC STAINLESS STEEL COMPOSITION, METHOD FOR MAKING A MECHANICAL PART FROM SAID STEEL AND RESULTING PART

Title (de)  
ZUSAMMENSETZUNG VON MARTENSITISCHEM NICHTROSTENDEM STAHL, VERFAHREN ZUR HERSTELLUNG EINES MECHANISCHEN TEILS DARAUS UND RESULTIERENDES TEIL

Title (fr)  
COMPOSITION D'ACIER INOXYDABLE MARTENSITIQUE, PROCEDE DE FABRICATION D'UNE PIECE MECANIQUE A PARTIR DE CET ACIER ET PIECE AINSI OBTENUE

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Application  
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Abstract (en)  
[origin: WO2007003748A1] The invention concerns martensitic stainless steel, characterized in that its composition in weight percentages is as follows: 9 % = Cr = 13 %; 1.5 % = Mo = 3 %; 8 % = Ni = 14 %; 1 % = Al = 2 %; 0.5 % = Ti = 1.5 % with Al + Ti = 2.25 %; traces = Co = 2 %; traces = W = 1 % with Mo + (W/2) = 3 %; traces = P = 0.02 %; traces = S = 0.0050 %; traces = N = 0.0060 %; traces = C = 0.025 %; traces = Cu = 0.5 %; traces = Mn = 3 %; traces = Si = 0.25 %; traces = O = 0.0050 %; and is such that: Ms (°C) = 1302 42 Cr 63 Ni 30 Mo + 20Al - 15W - 33Mn - 28Si - 30Cu - 13Co + 10 Ti = 50Cr eq / Ni eq = 1 .05 with Cr eq (%) = Cr + 2Si + Mo + 1.5 Ti + 5.5 Al + 0.6W Ni eq (%) = 2Ni + 0.5 Mn + 3O C + 25 N + Co + 0.3 Cu. The invention also concerns a method for making a mechanical part using said steel, and the resulting part.

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