

Title (en)
HIGH STRENGTH AUSTENITIC STAINLESS STEEL AND PRODUCTION METHOD THEREOF

Title (de)
HOCHFESTER AUSTENITISCHER EDELSTAHL UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)
ACIER INOXYDABLE AUSTÉNITIQUE À RÉSISTANCE ÉLEVÉE ET SON PROCÉDÉ DE PRODUCTION

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Application
EP 15834538 A 20150821

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Abstract (en)
[origin: WO2016027009A1] The invention relates to an austenitic stainless steel. The steel contains in weight % 0-0.4 % C, 0-3 % Si, 3-20 % Mn, 10-30 % Cr, 0-4.5 % Ni, 0-3 % Mo, 0-3 % Cu, 0.05-0.5 % N, 0-0.5 % Nb, 0-0.5 % Ti, 0-0.5 % V, the balance of Fe and inevitable impurities. The content of at least one of the elements in the group of niobium (Nb), titanium (Ti) or vanadium (V) is more than 0.05 % so that the total amount of the niobium (Nb), titanium (Ti) and vanadium (V) contents is at the range of 0.05 - 0.5 % for having the grain size of lower than 10 micrometer after annealing of the cold deformed product and the difference between the yield strengths of the steel measured in transverse and parallel directions to the rolling direction is lower than 5 %. The invention also relates to a method for producing such an austenitic stainless steel.

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Citation (search report)
• [X] JP 2014001422 A 20140109 - NIPPON STEEL & SUMITOMO METAL CORP
• [A] WO 2010087766 A1 20100805 - SANDVIK INTELLECTUAL PROPERTY [SE], et al
• [A] EP 0694626 A1 19960131 - ACERINOX SA [ES]
• [A] JP 2008038191 A 20080221 - NIPPON METAL IND
• See references of WO 2016027009A1

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WO 2016027009 A1 20160225; CN 106574351 A 20170419; EP 3191612 A1 20170719; EP 3191612 A4 20180124; FI 127274 B 20180228; JP 2017531093 A 20171019; KR 20170029631 A 20170315; US 2017268076 A1 20170921

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