

Title (en)

AUSTENITIC STAINLESS STEEL FOR HIGH VACUUM AND HIGH PURITY GAS TUBE APPLICATION

Title (de)

AUSTENITISCHER NICHTROSTENDER STAHL FÜR DIE HOCHVAKUUM- UND REINGASROHRANWENDUNG

Title (fr)

ACIER INOXYDABLE AUSTÉNITIQUE POUR APPLICATIONS SOUS VIDE POUSSÉ ET EN TUBES À GAZ DE HAUTE PURETÉ

Publication

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Application

EP 08861296 A 20081217

Priority

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Abstract (en)

[origin: WO2009078663A1] The object of the present invention is to provide stainless steel for high vacuum and high purity gas tube applications not having intrusion of impure particles into a processing gas and being cost-efficient. In order to accomplish the object, the present invention provides an austenitic stainless steel for a high vacuum and high purity gas tube application, the stainless steel including, in percent by weight, 0.1% or less of C, 1% or less of Si, 0.5 to 2% of Mn, 0.05% or less of P, 0.01% or less of S, 15 to 30% of Cr, 7 to 20% of Ni, 4% or less of Mo, 3% or less of Cu, 0.05% or less of N, 0.01% or less of B, 0.01% or less of O, a remaining part of Fe, and unavoidable impurities, wherein Ti content is limited to 0.005% or less, Al content is limited to 0.005 to 0.05%, and Ca content is limited to 0.0005 to 0.003%.

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Citation (search report)

- [X] US 2003127162 A1 20030710 - KIDANI SHIGERU [JP], et al
- [X] JP H08109447 A 19960430 - NIKKO KINZOKU KK
- [X] WO 9506142 A1 19950302 - PO HANG IRON & STEEL [KR], et al
- [X] US 5651937 A 19970729 - DESCAYES FREDERIC [FR]
- [X] US 6123784 A 20000926 - HAVETTE ETIENNE [FR]
- See references of WO 2009078663A1

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DOCDB simple family (publication)

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