

Title (en)

Development of a very high resistance to sensitization in austenitic stainless steel through special heat treatment resulting in grain boundary microstructural modification

Title (de)

Entwicklung einer sehr hohen Widerstandsfähigkeit von austenitischem Edelstahl durch spezielle Wärmebehandlung als Ergebnis einer mikrostrukturellen Korngrenzenänderung

Title (fr)

Développement très d'un de haute résistance à la sensibilisation en acier inoxydable austénitique par le traitement thermique spécial ayant comme résultat la modification microstructurale de joint de grain

Publication

**EP 2112237 A1 20091028 (EN)**

Application

**EP 08159613 A 20080703**

Priority

IN 893MU2008 A 20080421

Abstract (en)

Process for achieving enhanced sensitization resistance as measured by degree of sensitization (DOS) which is reverse of resistance sensitization and having value of 0.02 to 2.72 %, depending upon the types of austenitic stainless steel in austenitic stainless steel by modifying the initial microstructure of the stainless steel through specific heat treatment without involving mechanical treatment. The process comprises exposing wrought stainless steel to specific heat treatment at the temperature range of 1100-1250°C for 30 minutes to two hours and cooling to room temperature.

IPC 8 full level

**C21D 8/02** (2006.01); **C21D 6/00** (2006.01); **C22C 38/18** (2006.01); **C22C 38/40** (2006.01)

CPC (source: EP)

**C21D 6/001** (2013.01); **C21D 6/002** (2013.01); **C21D 8/0205** (2013.01); **C21D 8/0221** (2013.01); **C22C 38/18** (2013.01); **C22C 38/40** (2013.01)

Citation (applicant)

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