

Title (en)  
FERRITIC STAINLESS STEEL WITH IMPROVED GRAIN BOUNDARY EROSION, AND MANUFACTURING METHOD THEREOF

Title (de)  
FERRITISCHER EDELSTAHL MIT VERBESSERTER KORNGRENZENEROSION UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)  
ACIER INOXYDABLE FERRITIQUE PRÉSENTANT UNE ÉROSION DE JOINT DE GRAIN AMÉLIORÉE, ET SON PROCÉDÉ DE FABRICATION

Publication  
**EP 4257719 A1 20231011 (EN)**

Application  
**EP 21900822 A 20211029**

Priority  
• KR 20200167400 A 20201203  
• KR 2021015393 W 20211029

Abstract (en)  
Disclosed is a ferritic stainless steel with reduced grain boundary erosion. A ferritic stainless steel with reduced grain boundary erosion according to an embodiment includes, in percent by weight (wt%), 0.005 to 0.1% of C, 0.01 to 1.0% of Si, 0.01 to 1.5% of Mn, 13 to 18% of Cr, 0.005 to 0.1% of N, 0.005 to 0.2% of Al, 0.005 to 0.1% of Ni, 0.003% or less of Mo, 0.05% or less of P, 0.005% or less of S, and the remainder being Fe and impurities, and satisfies an Ac1, defined by Formula (1) below, of 900 or more and 990 or less:  $Ac1 = 36Cr + 90Si + 76Mo + 760Al + 350 - 800C + 1300N + 150Ni + 50Mn$  (wherein C, N, Si, Mn, Cr, Ni, Al, Mn, and Mo represent a content (wt%) of each element).

IPC 8 full level  
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CPC (source: EP KR US)  
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