

Title (en)  
LOW CHROME FERRITIC STAINLESS STEEL WITH HIGH CORROSION RESISTANCE AND STRETCHABILITY AND METHOD OF MANUFACTURING THE SAME

Title (de)  
CHROMARMER FERRITISCHER NICHTROSTENDER STAHL MIT HOHER KORROSIONSBESTÄNDIGKEIT UND ABSTRECKBARKEIT UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)  
ACIER INOXYDABLE FERRITIQUE À FAIBLE TAUX DE CHROME AYANT UNE RÉSISTANCE À LA CORROSION ET UNE EXTENSIBILITÉ ÉLEVÉES ET SON PROCÉDÉ DE FABRICATION

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Application  
**EP 08852156 A 20080930**

Priority

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Abstract (en)  
[origin: WO2009066868A1] The present invention relates to a low chrome ferritic stainless steel with a high corrosion resistance and stretchability and a method of manufacturing the same, wherein the low chrome ferritic stainless steel with the high corrosion resistance and stretchability is composed of C of 0.03wt% or less, Si of 0.5wt% or less, Mn of 0.5wt% or less, P of 0.035wt% or less, S of 0.01wt% or less, Cr of 14 to 16wt%, Mo of 0.2wt% or less, N of 0.030wt% or less, Cu of 0.5wt% or less, Al of 0.05 wt% or less, Ni of 0.2wt% or less, C+N of 0.040wt% or less, Ti of 0.5wt% or less, remaining Fe and, inevitably added impurities, being controlled in EL value defined by Equation 1 below to be 33 or more and in P.I. value defined by Equation 2 below to be in a range of 14 to 16.  $EL = -162.1 \times (C+N) - 0.2 \times Cr - 1.1 \times Mo - 0.2 \times Ti / (C+N) + 42.2$  (1)  $P.I. = Cr + 3.3Mo$  (2)

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Citation (search report)

- [X] JP 2003342694 A 20031203 - JFE STEEL KK
- [X] JP 2005314797 A 20051110 - NIPPON STEEL & SUMIKIN SST
- [X] JP S5861258 A 19830412 - NISSHIN STEEL CO LTD
- [X] JP H07150244 A 19950613 - SUMITOMO METAL IND
- [XI] JP 2004323907 A 20041118 - NIPPON STEEL CORP
- [X] JP 2004250761 A 20040909 - NISSHIN STEEL CO LTD, et al
- [X] US 4690798 A 19870901 - NARUTANI TETSU [JP], et al
- [A] EP 1225242 A2 20020724 - KAWASAKI STEEL CO [JP]
- [A] US 2004154708 A1 20040812 - TAKAHASHI AKIHIKO [JP], et al
- [A] EP 1514949 A1 20050316 - JFE STEEL CORP [JP]
- [A] EP 0625584 A1 19941123 - KAWASAKI STEEL CO [JP]
- [A] JP H02301543 A 19901213 - KOBE STEEL LTD
- [A] JP H10280105 A 19981020 - KAWASAKI STEEL CO
- See references of WO 2009066868A1

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