

Title (en)
FERRITIC STAINLESS STEEL AND PRODUCTION METHOD THEREFOR

Title (de)
FERRITISCHER EDELSTAHL UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)
ACIER INOXYDABLE À BASE DE FERRITE ET PROCÉDÉ DE PRODUCTION S'Y RAPPORTANT

Publication
EP 3121304 B1 20190206 (EN)

Application
EP 15764119 A 20150225

Priority
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Abstract (en)
[origin: EP3121304A1] Provided is a ferritic stainless steel that has excellent corrosion resistance and displays good brazing properties when brazing is carried out at high temperature using a Ni-containing brazing metal. These effects are obtained as a result of the steel having a chemical composition containing, in mass%: 0.003% to 0.020% of C; 0.05% to 1.00% of Si; 0.10% to 0.50% of Mn, 0.05% or less of P; 0.01% or less of S; 16.0% to 25.0% of Cr; 0.05% to 0.35% of Ti; 0.005% to 0.05% of Al; and 0.005% to 0.025% of N, the balance being Fe and incidental impurities, and as a result of a nitrogen-enriched layer being created that has a nitrogen concentration peak value of 0.05 mass% to 0.30 mass% at a depth of within 0.05 µm of a surface of the steel.

IPC 8 full level
C22C 38/00 (2006.01); **C21D 1/06** (2006.01); **C21D 1/74** (2006.01); **C21D 9/46** (2006.01); **C22C 38/02** (2006.01); **C22C 38/04** (2006.01); **C22C 38/06** (2006.01); **C22C 38/20** (2006.01); **C22C 38/22** (2006.01); **C22C 38/24** (2006.01); **C22C 38/28** (2006.01); **C22C 38/32** (2006.01); **C22C 38/42** (2006.01); **C22C 38/44** (2006.01); **C22C 38/46** (2006.01); **C22C 38/48** (2006.01); **C22C 38/50** (2006.01); **C22C 38/54** (2006.01); **C23C 8/02** (2006.01); **C23C 8/26** (2006.01); **C23C 8/80** (2006.01)

CPC (source: EP KR US)
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