

Title (en)

Aluminum-containing ferritic stainless steel having excellent high temperature oxidation resistance and toughness.

Title (de)

Aluminium enthaltender rostfreier ferritischer Stahl mit hoher Beständigkeit gegen Hochtemperaturoxydation und hoher Zähigkeit.

Title (fr)

Acier inoxydable ferritique, contenant de l'aluminium et possédant une excellente résistance contre l'oxydation à haute température et une ténacité élevée.

Publication

EP 0480461 B1 19950816 (EN)

Application

EP 91117384 A 19911011

Priority

JP 27052190 A 19901011

Abstract (en)

[origin: EP0480461A1] There is disclosed a ferritic stainless steel essentially consisting of C: not more than 0.03 %, Si: less than 0.25 %, Mn: less than 0.25 %, P: not more than 0.03 %, S: less than 0.001 %, N: not more than 0.03 %, Cr: 15 - 25 %, Al: 3 - 6 %, at least one of REM, Y and alkaline earth metals: 0.01 - 0.2 %, optionally at least one of Nb, V and Ti: 0.05 - 1 % and the balance of Fe and unavoidable incidental impurities. This steel has excellent high temperature oxidation resistance, especially resistance to abnormal oxidation and high toughness and is suitable for manufacturing foil substrate for metallic catalytic converters for automobile exhaust gas treatment.

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C22C 38/18

IPC 8 full level

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CPC (source: EP KR)

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Cited by

DE10261207A1; US7776113B2; US7488360B2; US5411610A; EP0572674A4; US5480608A; EP0646657A4; EP0707889A1; EP0735153A1; FR2732360A1; US5866065A; CN1051582C

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