

Title (en)
HIGH-STRENGTH AUSTENITIC HEAT-RESISTING STEEL WITH EXCELLENT WELDABILITY AND GOOD HIGH-TEMPERATURE CORROSION RESISTANCE

Title (de)
HOCHFESTER, WÄRMEBESTÄNDIGER AUSTENITISCHER STAHL MIT HERVORRAGENDER SCHWEISSBARKEIT UND GUTEM HOCHTEMPERATURKORROSIONSWIDERSTAND

Title (fr)
ACIER THERMORESISTANT AUSTENITIQUE A RESISTANCE ELEVEE PRESENTANT UNE EXCELLENTE SOUDABILITE ET UNE BONNE RESISTANCE A LA CORROSION A HAUTE TEMPERATURE

Publication
EP 0708184 A4 19960703 (EN)

Application
EP 94914608 A 19940512

Priority
• JP 9400767 W 19940512
• JP 11195793 A 19930513

Abstract (en)
[origin: WO9426947A1] A high-strength austenitic heat-resisting steel that has excellent weldability and good high-temperature corrosion resistance and can exhibit excellent performance when used as the material of boilers to be used under the conditions becoming more and more severe. The steel comprises less than 0.02 % (by mass, the same will apply hereinbelow) of carbon, at most 1.5 % of silicon, 0.3-1.5 % of manganese, at most 0.02 % of phosphorus, at most 0.005 % of sulfur, 18-26 % of chromium, 20-40 % of nickel, 0.5-10.0 % of tungsten, 0.05-0.4 % of niobium, 0.01-0.2 % of titanium, 0.003-0.008 % of boron, 0.05-0.3 % of nitrogen, and if necessary at least one member of 0.5-2.0 % of molybdenum and/or 0.001-0.05 % of magnesium, 0.001-0.05 % of calcium and 0.001-0.15 % of rare earth element (REM), and the balance consisting of iron and inevitable impurities.

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C22C 38/54

IPC 8 full level
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C22C 30/00 (2013.01); **C22C 38/54** (2013.01)

Citation (search report)
• [Y] PATENT ABSTRACTS OF JAPAN vol. 12, no. 242 (C - 510) 8 July 1988 (1988-07-08)
• [Y] PATENT ABSTRACTS OF JAPAN vol. 13, no. 182 (C - 591) 27 April 1989 (1989-04-27)
• See references of WO 9426947A1

Cited by
US7815848B2; EP3100818A4; EP1445342A1; US6939415B2

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