Title (en)

HEAT-RESISTANT FERRITIC STAINLESS STEEL EXCELLENT IN LOW-TEMPERATURE TOUGHNESS, WELDABILITY AND HEAT RESISTANCE

Publication

EP 0478790 A4 19920812 (EN)

Application

EP 91906263 A 19910313

Priority

- JP 9100344 W 19910313
- JP 7478590 A 19900324

Abstract (en)

[origin: EP0478790A1] A heat-resistant ferritic stainless steel improved in low-temperature toughness, prevented from undergoing high-temperature weld crack, and useful as a material of a passage of automobile exhaust gas, particularly a passage exposed to high temperature between an engine and a converter, which comprises up to 0.03 % of carbon, 0.1 to 0.8 % of silicon, 0.6 to 2.0 % of manganese, up to 0,006 % of sulfur, up to 4 % of nickel, 17.0 to 25.0 % of chronium, 0.2 to 0.8 % of niobium, 1.0 to 4.5 % of molybdenum, 0.1 to 2.5 % of copper, up to 0.03 % of nitrogen, and optionally a necessary amount of at least one of aluminum, titanium, vanadium, zirconium, tungsten, boron and REM, wherein the manganese to sulfur ratio is 200 or above, [Nb]=Nb % - 8(C % + N %) >/= 0.2, and Ni % + Cu % </= 4, the balance being iron and inevitable impurities in the production process.

IPC 1-7

C22C 38/48; C22C 38/50; C22C 38/54; C22C 38/58

IPC 8 full level

C22C 38/00 (2006.01); **C22C 38/48** (2006.01); **C22C 38/58** (2006.01)

CPC (source: EP KR)

C22C 38/48 (2013.01 - EP KR)

Citation (search report)

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- [X] DE 2701329 B1 19771222 - THYSSEN EDELSTAHLWERKE AG
- [A] US 4391635 A 19830705 - MURAKAMI SHINICHI [JP], et al
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