Title (en)

Titanium alloy excellent in intergranular corrosion resistance

Title (de)

Titanlegierung mit herausragender interkristalliner Korrosionsbeständigkeit

Title (fr)

Alliage de titane excellent dans la résistance contre la corrosion intergranulaire

Publication

EP 2402468 A1 20120104 (EN)

Application

EP 11005263 A 20110628

Priority

JP 2010148100 A 20100629

Abstract (en)

A titanium alloy contains Ni in a content of 0.35% to 0.55%; Pd in a content of 0.01% to 0.02%; Ru in a content of 0.02% to 0.04%; and Cr in a content of 0.1% to 0.2%, with the remainder including titanium and inevitable impurities, in which the titanium alloy includes nickel-rich phases, each nickel-rich phase being a phase (other than titanium alpha phase) locally containing Ni in a content of 10 times or more the average Ni content of the titanium alloy, the nickel-rich phases are aligned along a rolling direction to form a row, and a multiplicity of the rows are aligned substantially in parallel in a cross direction. The titanium alloy minimizes the proceeding of intergranular corrosion even in specific environments where the intergranular corrosion may easily proceed.

IPC 8 full level

C22C 14/00 (2006.01); **C22F 1/18** (2006.01)

CPC (source: EP KR US)

C22C 14/00 (2013.01 - EP KR US); **C22F 1/183** (2013.01 - EP US); **F28F 21/086** (2013.01 - EP US)

Citation (applicant)

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- JP S61127844 A 19860616 - NIPPON MINING CO
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- TETSU-TO-HAGANE, IRON AND STEEL, vol. 80, no. 4, 1994, pages 353 - 358

Citation (search report)

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Designated contracting state (EPC)

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Designated extension state (EPC)

BA ME

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