

Title (en)

STAINLESS STEELS EXCELLENT IN THERMAL NEUTRON ABSORPTION

Title (de)

ROSTFREIER STAHL MIT HERVORRAGENDEN THERMISCH-NEUTRONEN-ADSORPTIONSEIGENSCHAFTEN

Title (fr)

ACIERS INOXYDABLES PARTICULIEREMENT UTILES POUR L'ABSORPTION DE NEUTRONS THERMIQUES

Publication

EP 0844312 B1 20000531 (EN)

Application

EP 96926611 A 19960808

Priority

- JP 9602258 W 19960808
- JP 20323095 A 19950809
- JP 27216495 A 19951020
- US 98468997 A 19971203

Abstract (en)

[origin: EP0844312A1] The ferritic stainless steel of the present invention contain the following main chemical elements, in which a relationship between B and Gd, preferably, satisfies the following equation (1) on the weight % basis: <TABLE> The austenitic stainless steel of the present invention contain the following main chemical elements, in which a relationship between B and Gd, preferably, satisfies the following equation (1) on the weight % basis: <TABLE> The stainless steel of the present invention described above are excellent in thermal neutron absorption ability, as well as are excellent in the workability such as hot workability and cold workability, and the corrosion resistance, particularly, the corrosion resistance for HAZ and are inexpensive for the manufacturing cost. Further, since the toughness, the weldability and the like are also satisfactory, they are extremely suitable to materials for use in nuclear fuel casks or the like: <MATH> in which <MATH>

IPC 1-7

C22C 38/32; G21F 1/08

IPC 8 full level

C22C 38/32 (2006.01); **C22C 38/54** (2006.01); **G21F 1/08** (2006.01)

CPC (source: EP)

C22C 38/32 (2013.01); **C22C 38/54** (2013.01); **G21F 1/08** (2013.01)

Cited by

CN113913680A; EP2749669A4; US9303301B2; US8481986B2; US8624211B2

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 0844312 A1 19980527; EP 0844312 A4 19981223; EP 0844312 B1 20000531

DOCDB simple family (application)

EP 96926611 A 19960808