

Title (en)

METHOD FOR MANUFACTURING STAINLESS STEEL PRODUCT BY NITROGEN ABSORPTION TREATMENT AND STAINLESS STEEL PRODUCT PRODUCED BY THE METHOD

Title (de)

VERFAHREN ZUR HERSTELLUNG VON ROSTFREI-STAHLPRODUKTEN MITTELS STICKSTOFFABSORPTIONSBEHANDLUNG UND DURCH DIESES VERFAHREN HERGESTELLTE ROSTFREI-STAHLPRODUKTE

Title (fr)

PROCEDE DE FABRICATION D'UN PRODUIT EN ACIER INOXYDABLE PAR TRAITEMENT PAR ABSORPTION D'AZOTE ET PRODUIT EN ACIER INOXYDABLE OBTENU SELON LEDIT PROCEDE

Publication

EP 1533395 A4 20080611 (EN)

Application

EP 03784626 A 20030808

Priority

- JP 0310164 W 20030808
- JP 2002231557 A 20020808

Abstract (en)

[origin: EP1533395A1] A method for manufacturing a stainless steel product, which comprises contacting a bulk product of a ferritic stainless steel having been formed into a desired shape through melting with an inert gas containing nitrogen at 800 DEG C or higher, to thereby convert the structure of the whole or a part of the bulk product to austenite and produce an austenitic product or a product having a two-phase structure comprised of ferrite and austenite, respectively. The method allows the reduction of the manufacturing cost of a formed austenitic stainless steel product to a satisfactorily low level, which results in the manufacture of a stainless steel product having satisfactory characteristics in both of strength and corrosion resistance at a satisfactorily low cost. <IMAGE>

IPC 8 full level

C21D 1/06 (2006.01); **C21D 1/74** (2006.01); **C21D 1/76** (2006.01); **C21D 6/00** (2006.01); **C22C 38/00** (2006.01); **C23C 8/26** (2006.01)

CPC (source: EP US)

C21D 1/74 (2013.01 - EP US); **C21D 1/76** (2013.01 - EP US); **C21D 6/002** (2013.01 - EP US); **C21D 8/0257** (2013.01 - EP US); **C22C 38/001** (2013.01 - EP US); **C23C 8/26** (2013.01 - EP US); **C21D 2211/001** (2013.01 - EP US); **C21D 2211/005** (2013.01 - EP US)

Citation (search report)

- [X] US 3943010 A 19760309 - HARTLINE III ALBERT G
- [X] US 2940880 A 19600614 - STANLEY JAMES K, et al
- [A] WO 9905340 A1 19990204 - RHP BEARINGS LTD [GB], et al
- See references of WO 2004015160A1

Cited by

US9382608B2; GB2545243A; GB2545243B; US10483037B2; WO2006134541A1

Designated contracting state (EPC)

CH FR GB LI

DOCDB simple family (publication)

EP 1533395 A1 20050525; EP 1533395 A4 20080611; JP 2004068115 A 20040304; JP 4009716 B2 20071121; US 2006037669 A1 20060223; WO 2004015160 A1 20040219

DOCDB simple family (application)

EP 03784626 A 20030808; JP 0310164 W 20030808; JP 2002231557 A 20020808; US 52367805 A 20050421