

Title (en)

PROCESS FOR IMPROVING THE CORROSION RESISTANCE OF METALS

Title (de)

VERFAHREN ZUR VERBESSERUNG DER KORROSIONSBESTÄNDIGKEIT VON METALLEN

Title (fr)

PROCEDE PERMETTANT D'AMELIORER LA RESISTANCE A LA CORROSION DES METAUX

Publication

EP 1639143 A2 20060329 (EN)

Application

EP 04734559 A 20040524

Priority

- GB 2004002232 W 20040524
- US 47318903 P 20030527

Abstract (en)

[origin: WO2004106559A2] A process for improving the corrosion resistance of metals, particularly steels and high nickel content alloys, is provided. The process comprises subjecting metal parts to one or more cryogenic treatment, optionally followed by one or more heat treatments. Cryogenic treatment preferably employs temperatures of between -90°C to -195°C, most preferably -180°C to -195°C. Heat treatment preferably employs temperatures of between 120°C to 175°C. The process may be employed in the treatment of metal parts and components. Heat exchanger tubes, cooler tubes, piping, especially chemical process piping, pumps, reactor vessels and storage tanks produced by a process are provided.

IPC 1-7

C21D 6/04

IPC 8 full level

C21D 6/04 (2006.01); **C22F 1/00** (2006.01); **C22F 1/10** (2006.01); **C21D 6/00** (2006.01)

CPC (source: EP)

C21D 6/04 (2013.01); **C22F 1/00** (2013.01); **C22F 1/10** (2013.01); **C21D 6/001** (2013.01)

Citation (search report)

See references of WO 2004106559A2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2004106559 A2 20041209; **WO 2004106559 A3 20050324**; CN 1795278 A 20060628; EP 1639143 A2 20060329; JP 2007503528 A 20070222

DOCDB simple family (application)

GB 2004002232 W 20040524; CN 200480014766 A 20040524; EP 04734559 A 20040524; JP 2006530534 A 20040524