

Title (en)

METHOD FOR PRODUCING METAL TUBE

Title (de)

HERSTELLUNGSVERFAHREN FÜR EIN METALLROHR

Title (fr)

PROCÉDÉ DE FABRICATION D'UN TUBE MÉTALLIQUE

Publication

EP 2397573 A4 20121226 (EN)

Application

EP 10741311 A 20100215

Priority

- JP 2010052165 W 20100215
- JP 2009032975 A 20090216

Abstract (en)

[origin: EP2397573A1] In this method, the inner surface of a metal pipe containing, by mass percent, 20 to 55% of Cr and 20 to 70% of Ni is subjected to mechanical treatment, the metal pipe is subjected to heat treatment such as to be held in a temperature range of 1050 to 1270 °C for 0.5 to 60 minutes, and thereby an oxide scale layer consisting mainly of Cr is formed on at least the inner surface of the metal pipe. A metal pipe excellent in carburization resistance and coking resistance in a carburizing gas environment can be obtained by the method.

IPC 8 full level

C23C 8/10 (2006.01); **B21C 37/20** (2006.01); **B21C 37/22** (2006.01); **B21C 37/30** (2006.01); **C21D 7/06** (2006.01); **C21D 9/08** (2006.01); **C22C 19/05** (2006.01); **C22C 38/00** (2006.01); **C22C 38/60** (2006.01); **F16L 9/02** (2006.01)

CPC (source: EP KR US)

B21C 37/20 (2013.01 - KR); **C10G 75/00** (2013.01 - EP US); **C21D 7/06** (2013.01 - KR); **C21D 8/105** (2013.01 - EP US); **C21D 9/08** (2013.01 - EP KR US); **C21D 9/14** (2013.01 - EP US); **C22C 19/05** (2013.01 - EP US); **C22C 19/052** (2013.01 - EP US); **C22C 19/053** (2013.01 - EP US); **C22C 19/055** (2013.01 - EP US); **C22C 19/058** (2013.01 - EP US); **C22C 38/001** (2013.01 - EP US); **C22C 38/02** (2013.01 - EP US); **C22C 38/04** (2013.01 - EP US); **C22C 38/40** (2013.01 - EP US); **C22F 1/10** (2013.01 - EP US); **C23C 8/02** (2013.01 - EP US); **C23C 8/10** (2013.01 - EP KR US)

Citation (search report)

[X] EP 1498508 A1 20050119 - SUMITOMO METAL IND [JP]

Cited by

RU2636338C1; EP2799570A4; EP3431622A4; EP3540088A4; US11162151B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)

EP 2397573 A1 20111221; **EP 2397573 A4 20121226**; **EP 2397573 B1 20170920**; CA 2750014 A1 20100819; CA 2750014 C 20141202; CN 102308015 A 20120104; JP 4586938 B2 20101124; JP WO2010093034 A1 20120816; KR 20110107370 A 20110930; US 2011308669 A1 20111222; WO 2010093034 A1 20100819

DOCDB simple family (application)

EP 10741311 A 20100215; CA 2750014 A 20100215; CN 201080006993 A 20100215; JP 2010052165 W 20100215; JP 2010506734 A 20100215; KR 20117019029 A 20100215; US 201113207535 A 20110811