

Title (en)

NITRIDED Mo ALLOY WORKED MATERIAL HAVING HIGH CORROSION RESISTANCE, HIGH STRENGTH AND HIGH TOUGHNESS AND METHOD FOR PRODUCTION THEREOF

Title (de)

NITRIDIRTER Mo-LEGIERUNGSWERKSTOFF MIT HOHER KORROSIONSBESTÄNDIGKEIT, HOHER FESTIGKEIT UND HOHER ZÄHIGKEIT UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

ALLIAGE DE MO NITRURE OUVRE

Publication

EP 1491651 A4 20080827 (EN)

Application

EP 03745433 A 20030327

Priority

- JP 0303912 W 20030327
- JP 2002098039 A 20020329

Abstract (en)

[origin: EP1491651A1] Nitrided molybdenum alloy worked material (1) comprises base molybdenum alloy worked material and molybdenum nitride layer (4) formed on the surface. The base worked material contains fine nitride particles (2) formed by nitriding a metal element present inside the worked material. The nitride layer is formed by nitriding a worked structure or a recovered structure.

IPC 1-7

C23C 8/24; **C22C 27/04**

IPC 8 full level

F02M 61/18 (2006.01); **C22C 1/10** (2006.01); **C22C 27/04** (2006.01); **C23C 8/02** (2006.01); **C23C 8/24** (2006.01); **C23C 26/00** (2006.01)

CPC (source: EP KR US)

C22C 27/04 (2013.01 - EP KR US); **C23C 8/02** (2013.01 - EP US); **C23C 8/24** (2013.01 - EP KR US); **C23C 26/00** (2013.01 - EP US)

Citation (search report)

- [XY] JP H11286770 A 19991019 - YOSHIOKA TAKASHI
- [YA] WO 0118276 A1 20010315 - JAPAN SCIENCE & TECH CORP [JP], et al
- [A] JP S59208066 A 19841126 - TOSHIBA KK, et al
- [A] DATABASE WPI Week 199327, Derwent World Patents Index; AN 1993-218567, XP002487769
- [A] NAGAE MASAHIRO ET AL: "Surface modification of molybdenum alloys by nitriding", ADVANCES IN POWDER METALLURGY & PARTICULATE MATERIALS, METAL POWDER INDUSTRIES FEDERATION, PRINCETON, NJ, US, vol. 3, 1 January 1999 (1999-01-01), pages 11/109 - 11/116, XP008093835, ISSN: 1065-5824 & EP 1219722 A1 20020703 - JAPAN SCIENCE & TECH CORP [JP]
- See references of WO 03083157A1

Cited by

CN108348339A; EP3316826A4; US11779685B2; US11766506B2; US10682437B2

Designated contracting state (EPC)

AT DE FR GB NL

DOCDB simple family (publication)

EP 1491651 A1 20041229; **EP 1491651 A4 20080827**; **EP 1491651 B1 20111116**; AT E533870 T1 20111215; CA 2480787 A1 20031009; JP 2003293116 A 20031015; JP 4302930 B2 20090729; KR 100611725 B1 20060810; KR 20040105796 A 20041216; US 2006054247 A1 20060316; WO 03083157 A1 20031009

DOCDB simple family (application)

EP 03745433 A 20030327; AT 03745433 T 20030327; CA 2480787 A 20030327; JP 0303912 W 20030327; JP 2002098039 A 20020329; KR 20047015093 A 20030327; US 50915605 A 20051101