

Title (en)  
Use of a steel alloy as a substance for producing dynamically loaded tube components and tube component

Title (de)  
Verwendung einer Stahllegierung als Werkstoff zur Herstellung von dynamisch belasteten Rohrbauteilen und Rohrbauteil

Title (fr)  
Utilisation d'un alliage d'acier en tant que matière première pour la fabrication de composants de tuyaux chargés dynamiquement et composant de tuyau

Publication  
**EP 1961832 A1 20080827 (DE)**

Application  
**EP 08002285 A 20080207**

Priority  
DE 102007006875 A 20070207

Abstract (en)  
Use of a steel alloy containing (in wt.%) 0.32-0.45 carbon, 0.8-2.2 silicon, 0.1-0.8 manganese, 0.8-1.8 chromium, maximum 0.015 nitrogen, 0.01-0.08 niobium, maximum 0.4 vanadium, 0.001-0.005 boron and a balance of iron as a material in the production of dynamically loaded tubular components is new. The tubular component has a tensile strength in the annealed state of more than 1800 MPa and a yield point of more than 1600 MPa. An independent claim is also included for a tubular component made from the above steel alloy.

Abstract (de)  
Verwendung einer Stahllegierung als Werkstoff zur Herstellung von dynamisch belasteten Rohrbauteilen, die in Gewichtsprozenten aus Rest Eisen und üblicher Verunreinigungen besteht, wobei die Zugfestigkeit R<sub>m</sub> des Rohrbauteils im vergüteten Zustand größer als 1.800 MPa und die Streckgrenze R<sub>p0,2</sub> größer als 1.600 MPa ist.

IPC 8 full level  
**C22C 38/26** (2006.01); **C21D 8/10** (2006.01); **C21D 9/08** (2006.01); **C22C 38/32** (2006.01)

CPC (source: EP)  
**C21D 6/002** (2013.01); **C21D 8/105** (2013.01); **C21D 9/08** (2013.01); **C22C 38/02** (2013.01); **C22C 38/04** (2013.01); **C22C 38/24** (2013.01); **C22C 38/26** (2013.01); **C22C 38/34** (2013.01); **C21D 2211/001** (2013.01); **C21D 2211/004** (2013.01); **C21D 2211/009** (2013.01)

Citation (applicant)

- EP 0753595 B1 20010808 - BENTELER WERKE AG [DE]
- EP 1698712 A1 20060906 - KOBE STEEL LTD [JP]
- EP 1029720 A2 20000823 - NHK SPRING CO LTD [JP]

Citation (search report)

- [Y] EP 1029720 A2 20000823 - NHK SPRING CO LTD [JP]
- [YD] EP 1698712 A1 20060906 - KOBE STEEL LTD [JP]
- [A] US 4533402 A 19850806 - OHNO AKIRA [JP], et al
- [A] DE 4321241 A1 19950105 - HESONWERK DR ISKE GMBH [DE]
- [A] DE 102004053620 A1 20060504 - SALZGITTER FLACHSTAHL GMBH [DE]
- [A] EP 0630417 B1 20000920 - CONS METAL PROD [US]
- [A] US 2002153070 A1 20021024 - TOYOOKA TAKAAKI [JP], et al
- [A] JP 2004263247 A 20040924 - DAIDO STEEL CO LTD

Cited by  
EP2617855A3; US10041157B2; US11519047B2; US11384415B2; WO2017085135A1

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 MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)  
AL BA MK RS

DOCDB simple family (publication)  
**EP 1961832 A1 20080827**; **EP 1961832 B1 20111130**; AT E535625 T1 20111215; DE 102007006875 A1 20080814

DOCDB simple family (application)  
**EP 08002285 A 20080207**; AT 08002285 T 20080207; DE 102007006875 A 20070207