

Title (en)

Cast iron axle leg with moulded steel core - method for manufacturing the axle leg

Title (de)

Guss-Achsschenkel mit eingegossenen Stahlkern - Verfahren zur Herstellung des Achsschenkels

Title (fr)

Fusée d'essieu en fonte dotée d'un noyau d'acier coulé - procédé de fabrication de la fusée d'essieu

Publication

**EP 2319639 A1 20110511 (DE)**

Application

**EP 09175504 A 20091110**

Priority

EP 09175504 A 20091110

Abstract (en)

The steering knuckle, which is formed as casting parts from a nodular cast iron alloy, comprises a steel pin (3) completely or concavely formed at axis region (2) of the knuckle in the inner region. The steel pin is obtained from commercial steel with high elongation. The nodular cast iron alloy has a high mechanical strength (500-850 MPa), high yield strength (350-550 MPa) and high toughness (12%). An independent claim is included for a process for manufacturing a steering knuckle.

Abstract (de)

Die Erfindung betrifft einen Achsschenkel und ein Verfahren zur Herstellung des Achsschenkels, bestehend aus einem Stahlkern ( der auch hohl ausgeführt sein kann) und einem den Stahlkern umgebenden Gussteil.

IPC 8 full level

**B22D 19/00** (2006.01); **B22C 9/10** (2006.01); **B22D 19/16** (2006.01); **C22C 37/04** (2006.01); **C22C 37/06** (2006.01); **C22C 37/10** (2006.01)

CPC (source: EP US)

**B22C 9/10** (2013.01 - EP US); **B22D 19/0054** (2013.01 - EP US); **B22D 19/16** (2013.01 - EP US); **C22C 37/04** (2013.01 - EP US); **C22C 37/06** (2013.01 - EP US); **C22C 37/10** (2013.01 - EP US)

Citation (applicant)

- DE 2349731 A1 19740418 - DAYTON WALTHER CORP
- EP 0403799 A2 19901227 - SCHWAEBISCHE HUETTENWERKE GMBH [DE]
- DE 102004056331 A1 20060524 - FISCHER GEORG FAHRZEUGTECH [CH]
- DE 19500605 A1 19960718 - REXROTH MANNESMANN GMBH [DE]

Citation (search report)

- [Y] EP 0403799 A2 19901227 - SCHWAEBISCHE HUETTENWERKE GMBH [DE]
- [Y] DE 102004056331 A1 20060524 - FISCHER GEORG FAHRZEUGTECH [CH]
- [A] DE 19500605 A1 19960718 - REXROTH MANNESMANN GMBH [DE]
- [AD] DE 2349731 A1 19740418 - DAYTON WALTHER CORP

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 2319639 A1 20110511**; BR PI1004725 A2 20130226; CN 102052385 A 20110511; JP 2011101899 A 20110526; US 2011109151 A1 20110512

DOCDB simple family (application)

**EP 09175504 A 20091110**; BR PI1004725 A 20101109; CN 201010550406 A 20101109; JP 2010250659 A 20101109; US 94260210 A 20101109