

Title (en)

BEARING ASSEMBLY FOR ROTATABLY SUPPORTING A MACHINE ELEMENT AND METHOD FOR FIXING A TAPERED ROLLER BEARING TO A MACHINE ELEMENT

Title (de)

LAGERANORDNUNG ZUR DREHBAREN LAGERUNG EINES MASCHINENTEILS UND VERFAHREN ZUM FIXIEREN EINES KEGELROLLENLAGERS AN EINEM MASCHINENTEIL

Title (fr)

AGENCEMENT DE PALIER DESTINÉ À SUPPORTER UNE PIÈCE DE MACHINE TOURNANTE ET PROCÉDÉ DE FIXATION D'UN PALIER À ROULEAUX CONIQUES SUR UNE PIÈCE DE MACHINE

Publication

EP 2414692 A1 20120208 (DE)

Application

EP 10713569 A 20100401

Priority

- EP 2010002102 W 20100401
- DE 102009015827 A 20090401

Abstract (en)

[origin: WO2010112229A1] The invention relates to a bearing assembly, having a two-rowed tapered roller bearing (1) for rotatably supporting a machine element (3) and having a clamping device (2) for fixing the tapered roller bearing (1) to the machine element (3). The tapered roller bearing (1) has an outer ring (5), the outer diameter of which is at least 1 meter, a first inner ring (7), a second inner ring (9), which is axially disposed next to the first inner ring (7), a set of conically designed first rolling elements (11), which roll between the outer ring (5) and the first inner ring (7), and a set of conically designed second rolling elements (12), which are axially disposed next to the first rolling elements (11) and which roll between the outer ring (5) and the second inner ring (9). The clamping device (2) has a rigid component (18) and an elastically deformable component (19, 23). The rigid component (18) of the clamping device (2) axially stops at the machine element (3). The elastically deformable component (19, 23) of the clamping device (2) is axially clamped and thus axially deformed compared to a relaxed state. The elastically deformable component (19, 23) of the clamping device (2) is connected to the first inner ring (7) of the tapered roller bearing (1), to the second inner ring (9) of the tapered roller bearing (1), to the rigid component (18) of the clamping device (2), or to the machine element (3).

IPC 8 full level

F16C 19/38 (2006.01); **F03D 80/70** (2016.01); **F16C 25/08** (2006.01); **F16C 35/063** (2006.01)

CPC (source: EP)

F03D 80/70 (2016.05); **F16C 19/386** (2013.01); **F16C 25/083** (2013.01); **F16C 35/063** (2013.01); **F16C 2300/14** (2013.01); **F16C 2360/31** (2013.01); **Y02E 10/72** (2013.01)

Citation (search report)

See references of WO 2010112229A1

Citation (examination)

- CH 265281 A 19491130 - LIECHTI WALTER [CH]
- CH 407666 A 19660215 - FISCHER AG GEORG [CH]
- JP 2006002815 A 20060105 - KOYO SEIKO CO
- JP 2003184873 A 20030703 - KOYO SEIKO CO
- DE 102007014010 A1 20080925 - SCHAEFFLER KG [DE]
- US 2736617 A 19560228 - LIPPMANN ARTHUR W

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)

DE 102009015827 A1 20101007; **DE 102009015827 B4 20231102**; CN 102449331 A 20120509; CN 102449331 B 20141126; EP 2414692 A1 20120208; WO 2010112229 A1 20101007

DOCDB simple family (application)

DE 102009015827 A 20090401; CN 201080023768 A 20100401; EP 10713569 A 20100401; EP 2010002102 W 20100401