

Title (en)

BEARING SYSTEM FOR A WORM IN A STEERING GEAR

Title (de)

LAGERUNG EINER SCHNECKE IN EINEM LENKGETRIEBE

Title (fr)

SYSTÈME D'APPUI POUR VIS SANS FIN DANS UN MÉCANISME DE DIRECTION

Publication

**EP 2427360 A1 20120314 (DE)**

Application

**EP 10712419 A 20100331**

Priority

- EP 2010054291 W 20100331
- DE 102009002940 A 20090508

Abstract (en)

[origin: WO2010127915A1] The invention relates to a bearing system for a worm (S) engaging with a worm wheel (SR) as part of a steering gear, wherein the bearing system comprises at least one bearing (FL) with an outer ring (1), an inner ring (2), and rolling bodies (4) that are movably accommodated between the outer and inner rings, the bearing (FL) being pivotally arranged in a bearing seat (6) for accommodating the outer ring (1) of the bearing (FL), and wherein the inner ring (2) accommodates one of the two shaft ends of the worm (S) in order to seat said shaft end (WS) of the worm (S) radially in the housing (G) of the steering gear. For an improved dampening of the worm (S) at least one spring element (FE1), which exerts a spring force on a region (1B) of the outer ring (1) of the bearing (FL), is provided at the bearing (FL), said spring force supporting a pivotal motion (V) of the worm (S) toward the worm wheel (SR).

IPC 8 full level

**B62D 5/04** (2006.01); **F16C 27/04** (2006.01); **F16H 55/24** (2006.01); **F16H 57/021** (2012.01)

CPC (source: EP US)

**B62D 5/0409** (2013.01 - EP US); **F16C 27/04** (2013.01 - EP US); **F16H 55/24** (2013.01 - EP US); **F16C 2326/24** (2013.01 - EP US); **F16H 2057/0213** (2013.01 - EP US); **Y10T 74/18792** (2015.01 - EP US); **Y10T 74/19828** (2015.01 - EP US)

Citation (search report)

See references of WO 2010127915A1

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 102009002940 A1 20101111**; CN 102421654 A 20120418; CN 102421654 B 20140507; EP 2427360 A1 20120314; US 2012125132 A1 20120524; US 8539849 B2 20130924; WO 2010127915 A1 20101111

DOCDB simple family (application)

**DE 102009002940 A 20090508**; CN 201080020113 A 20100331; EP 10712419 A 20100331; EP 2010054291 W 20100331; US 201113373080 A 20111103