

Title (en)

INTEGRAL BUSHING ASSEMBLY FOR A RACK AND PINION STEERING GEAR

Title (de)

INTEGRALE BUCHSENANORDNUNG FÜR EIN ZAHNSTANGEN-LENKGETRIEBE

Title (fr)

ENSEMBLE BAGUE DE COMMANDE INTEGREE POUR ENGRENAGE DE DIRECTION A PIGNON ET CREMAILLERE

Publication

**EP 1429953 A4 20080723 (EN)**

Application

**EP 02799566 A 20020904**

Priority

- US 0228245 W 20020904
- US 96183801 A 20010924
- US 10934802 A 20020327

Abstract (en)

[origin: WO03026945A2] A fluid power assisted rack and pinion steering apparatus (10) for a vehicle includes a rack (40) connectable with steerable wheels of the vehicle, a housing (20) partially enclosing the rack (40) and defining a fluid chamber (39), a bushing (390 or 590) encircling the rack (40), a sleeve (420 or 620) supporting the rack (40) for sliding movement relative to the bushing (390 or 590), and a fluid tight seal 10 member (370 or 570) for sealing the fluid chamber (39) . The bushing (390 or 590) has opposite axial ends (391, 412 or 591, 612) and is secured in the housing (20) by an interference fit between an outer surface 394 or 594) of the bushing (390 or 590) and an inner 15 surface (26) of the housing (20) .The sleeve (420 or 620) extends between the bushing (390 or 590) and the rack (40) . The sleeve (420 or 620) has at least one radially extending tab (431 or 631) received in a corresponding recess (418 or 618) in the bushing (390 20 or 590) . The tab (431 or 631) provides a locating surface (441 or 641) for positioning the sleeve (420 or 620) relative to the bushing (390 or 590) . The seal .1 member (370 or 570) is located adjacent a recessed surface (394 or 594) of the bushing (390 or 590) .

IPC 1-7

**B62D 5/06**

IPC 8 full level

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CPC (source: EP KR US)

**B62D 3/12** (2013.01 - KR); **B62D 5/22** (2013.01 - EP); **F16J 3/042** (2013.01 - EP US)

Citation (search report)

- [XA] US 6155375 A 20001205 - GIERC DANIEL B [US], et al
- [A] "COMBINATION BUSHING AND SEAL ASSEMBLY FEATURES", RESEARCH DISCLOSURE, MASON PUBLICATIONS, HAMPSHIRE, GB, no. 373, 1 May 1995 (1995-05-01), pages 327/328, XP000518639, ISSN: 0374-4353
- See references of WO 03026945A2

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DOCDB simple family (publication)

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