

Title (en)

RACK AND PINION SERVO-ASSISTED STEERING SYSTEM, IN PARTICULAR FOR MOTOR VEHICLES.

Title (de)

ZAHNSTANGEN-HILFSKRAFTLENKUNG, INSBESONDERE FÜR KRAFTFAHRZEUGE.

Title (fr)

DIRECTION ASSISTEE A CREMAILLERE, NOTAMMENT POUR AUTOMOBILES.

Publication

EP 0659135 A1 19950628 (DE)

Application

EP 93920704 A 19930913

Priority

- DE 4230960 A 19920916
- EP 9302464 W 19930913

Abstract (en)

[origin: DE4230960A1] In a rack and pinion servo-assisted steering system, in particular for motor vehicles, a pinion (2) mounted in a steer housing (1) engages a rack (6). For servo-assisted steering, a servo-motor (11) is drivingly linked to the rack (6). The pinion (2) is swivelingly mounted in a fixed bearing (3) and in a loose bearing (4). The axis of a piston valve (26) arranged in the area of the loose bearing (4) is substantially perpendicular to the axis of the pinion (2). The loose bearing (4) is slidably guided perpendicularly to its axis only in the direction of the axis of the piston valve (26) in the steer housing (1). In this rack and pinion servo-assisted steering system, it is not the axial forces acting on the pinion (2) which are used to actuate the control valves, but the transverse forces. Actuation of the control valves is thus independent from the helix angle of the pinion teeth.

IPC 1-7

B62D 5/22

IPC 8 full level

B62D 5/087 (2006.01); **B62D 5/22** (2006.01)

CPC (source: EP)

B62D 5/087 (2013.01); **B62D 5/22** (2013.01)

Citation (search report)

See references of WO 9406668A1

Designated contracting state (EPC)

DE FR IT

DOCDB simple family (publication)

DE 4230960 A1 19940317; EP 0659135 A1 19950628; WO 9406668 A1 19940331

DOCDB simple family (application)

DE 4230960 A 19920916; EP 9302464 W 19930913; EP 93920704 A 19930913