

Title (en)  
DEVICE FOR TRANSMITTING ELECTRIC CURRENTS BETWEEN MUTUALLY ROTATABLE PARTS

Publication  
**EP 0089625 B1 19860108 (DE)**

Application  
**EP 83102635 A 19830317**

Priority  
DE 3210334 A 19820320

Abstract (en)  
[origin: EP0089625A1] 1. Device for transmitting electric currents between mutually rotatable parts, comprising a plurality of current-transmitting axial ball bearings (1a-1b) arranged in axial direction one above the other in a housing (15) coaxial with a component (10) which is rotatable relatively to said housing (15), whereby axially displaceable insulating rings (2, 3) are each arranged between the opposing bearing bushes (1a-1a, 1b-1b) of two adjacent ball bearings, said bearing bushes being connected to electric supply lines, and whereby the contact pressure is effected by a spring element (22) which is common to all axial ball bearings and is arranged at one end of the housing (15), the bearing bushes (1a, 1b) and the balls (25) being made of electrically conductive material, characterized in that the component which is rotatable relatively to the housing (15), is formed as a shaft (10) received in said housing (15), said shaft being rotatably mounted in the housing (15) through radial bearings (19, 20) receiving all of the forces which occur between the housing and the shaft, that the insulating rings (3, 2) are arranged in such a way that, alternately, an insulating ring (3) which is inserted in the housing (15) and is positively connected therewith, is followed by an insulating ring (2) which is slipped onto the shaft (10) and is positively connected therewith, that the bearing bushes (1a, 1b) which are provided with V- shaped recesses (24), are made of a silver alloy and are coated with a material consisting of or containing nitrides, and that the bearing pressure of the axial ball bearings (1a, 1b) is adjustable.

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**H01R 39/64**

IPC 8 full level  
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CPC (source: EP)  
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Cited by  
CN111370958A; CN111162422A; CN107431320A; CN111313199A; EP1358973A4; CN104317014A; US10038291B2; US7854615B1; WO2016083768A1

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