

Title (en)
FORCE-SENSING SYSTEM COMPRISING AT LEAST ONE BALL-AND-SOCKET JOINT

Title (de)
KRAFTMESSSYSTEM MIT ZUMINDEST EINEM KUGELGELENK

Title (fr)
SYSTEME DYNAMOMETRIQUE COMPRENANT AU MOINS UNE ARTICULATION A ROTULE

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Application
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Abstract (en)
[origin: WO2006042537A1] The invention relates to a force-sensing system comprising at least one ball-and-socket joint as well as a ball-and-socket joint for measuring forces. The ball-and-socket joint of the force-sensing system comprises a joint housing in which the ball of a ball pivot (1) can be slidably accommodated. The ball pivot (1) encompasses a shaft area and a joint ball. A force-sensing device (3) is disposed in the shaft area of the ball pivot. The inventive force-sensing system is characterized by an evaluation unit which is designed such that the signals of the force-sensing device (3) are output as a vector in a Cartesian system of coordinates. The inventive force-sensing system and ball-and-socket joint for measuring forces make it possible to reliably detect the mode of operation or load condition of entire subassemblies of a motor vehicle rather than just individual components while allowing the dynamics of vehicle movement to be regulated.

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