

Title (en)
FORCE SENSOR

Title (de)
KRAFTSENSOR

Title (fr)
CAPTEUR DE FORCE

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Application
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Abstract (en)
[origin: WO2004003501A1] The invention relates to a force sensor, especially for the detection of forces exerted on a vehicle seat, comprising a force measuring cell (1) which is provided with a Hall element. The force measuring cell (1) contains at least one flexion bar (2,3), which based on the effect of the force which is to be detected, influences the magnetic field in the region of a sensor element (6), which is sensitive to magnetic fields, of the measuring cell (1). Detection occurs with the aid of the Hall element (6) which is maintained on the at least one flexion bar (2,3). Said Hall element can be deflected by the force exerted on the flexion bars (2,3) in the field of a permanent magnet (4) which is arranged in a relatively fixed manner. A magnetic diagnostic field can be produced in the area of the Hall element (6), wherein the field lines thereof are arranged on the plane of the sensor element without influencing the measuring field.

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