

Title (en)

ACCELERATION SENSOR WITH AT LEAST ONE MAGNETIC SWITCH DEVICE

Publication

EP 0477839 A3 19920930 (DE)

Application

EP 91116199 A 19910924

Priority

DE 9013474 U 19900925

Abstract (en)

[origin: EP0477839A2] An acceleration or position sensor having at least one magnetic switch device and at least one permanent magnet that influences the switch device is described. The object is to increase the sensitivity of such sensors, in particular to specify acceleration sensors for small accelerations, for example $b < 1 \text{ g}$. The object is achieved by the combination of the following features: - the permanent magnet (10) is supported such that it cannot move with respect to the switch device (2) and - the acceleration sensor has a sphere (12) of ferromagnetic material which can be displaced under the influence of the acceleration and, over at least a part of its displacement path, influences the magnetic field of the permanent magnet. In one preferred embodiment, the switch device (2) is a reed switch. Various arrangements of such acceleration sensors are described, whose sensitivity is so high that they can also be used as position sensors. <IMAGE>

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H01H 35/14 (2006.01); H01H 36/00 (2006.01)

CPC (source: EP)

H01H 35/147 (2013.01); H01H 36/002 (2013.01)

Citation (search report)

- [X] US 3737599 A 19730605 - ZUVELA B
- [X] WO 8907830 A1 19890824 - MESSERSCHMITT BOELKOW BLOHM [DE]
- [A] WO 9010944 A1 19900920 - BAYERISCHE MOTOREN WERKE AG [DE]
- [A] DE 3713698 C1 19880714 - HOPT & SCHULER DDM
- [A] DE 2606790 A1 19760902 - HITACHI LTD, et al

Cited by

WO2004066330A1

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