

Title (en)

Acceleration switch

Title (de)

Beschleunigungsschalter

Title (fr)

Commutateur declenche par acceleration

Publication

**EP 0924730 A1 19990623 (EN)**

Application

**EP 97122084 A 19971215**

Priority

EP 97122084 A 19971215

Abstract (en)

An acceleration sensitive switch (10) equipped with an inertial mass member ("IMM") (12) that is deflectable from a holding position to an actuated position in response to a predetermined acceleration force. A voltage controlled hold plate (18) generates an electrostatic force that opposes the acceleration forces and holds the IMM (12) in a holding position until overcome by the predetermined acceleration force. The predetermined acceleration force necessary to trigger the switch may conveniently be adjusted by adjusting the voltage applied to the hold plate (18). The switch includes a self-test plate (34) that tests proper functioning of the switch. Other features include the interchangeability of the self-test plate and the hold plate. The switch is particularly useful as a safing switch in a system for controlling an air bag or other vehicle occupant restraint system.

<IMAGE>

IPC 1-7

**H01H 35/14**; **H01H 1/00**

IPC 8 full level

**H01H 1/00** (2006.01); **H01H 35/14** (2006.01)

CPC (source: EP)

**H01H 1/0036** (2013.01); **H01H 35/14** (2013.01); **H01H 2059/0072** (2013.01)

Citation (search report)

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- [A] PETERSEN K E: "BISTABLE MICROMECHANICAL STORAGE ELEMENT IN SILICON", IBM TECHNICAL DISCLOSURE BULLETIN, vol. 20, no. 12, May 1978 (1978-05-01), pages 5309, XP002032162

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CN112666032A; DE102006043512A1; CN111377322A; EP1596407A1; CN100378889C; DE102006043505A1; EP1590823A4; US7075393B2; US8626413B2; US7284432B2; WO2004038751A1; US8279026B2

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