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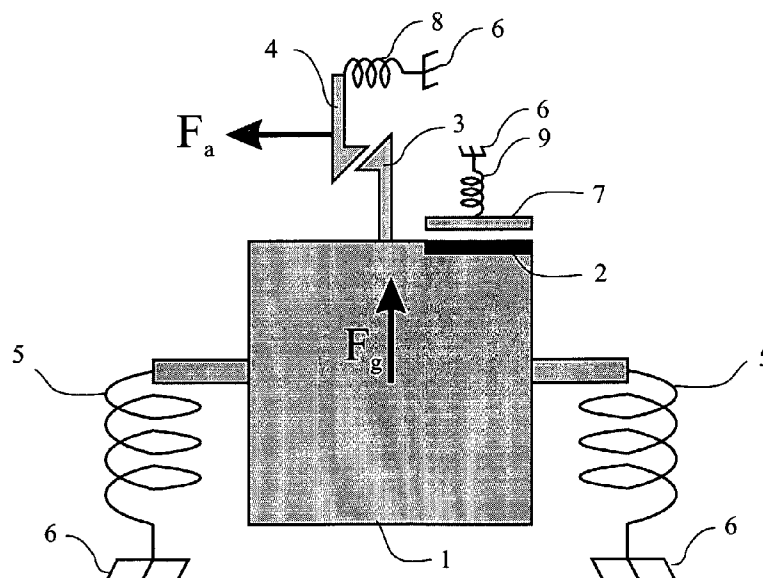
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(54) Title: RESETTABLE LATCHING MEMS SHOCK SENSOR APPARATUS AND METHOD



(57) Abstract: The Resettable Latching MEMS Shock Sensor provides the capability of recording external shock extremes without consuming electrical power. The device incorporates a shock sensitive suspended proof mass, spring-loaded contacts, latches, and actuators for device reset. The device can be designed, hardwired, or programmed to trigger at various shock levels. The device can be fabricated in a simple micromachining process that allows its size to be miniaturized for embedded and portable applications. During operation, the device consumes no quiescent power. The device can be configured to close a circuit, switch an interrupt signal, or switch some other electrical trigger signal between devices at the time of a shock extreme being reached, or it can be configured to latch and be polled at some time after the shock limit has occurred.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER IPC(8) - G08B 21/18 (2006.01) USPC - 340/665 According to International Patent Classification (IPC) or to both national classification and IPC		
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C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6,737,979 B1 (SMITH et al) 18 May 2004 (18.05.2004) entire document	1-10, 17-22, 25
Y		11-16, 23-24
Y	US 6,314,887 B1 (ROBINSON) 13 November 2001 (13.11.2001) entire document	11-16, 23, 24
A	US 2003/0020062 A1 (FARIS) 30 January 2003 (30.01.2003) entire document	1-25
A	US 6,514,781 B2 (CHANG et al) 04 February 2003 (04.02.2003) entire document	1-25
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