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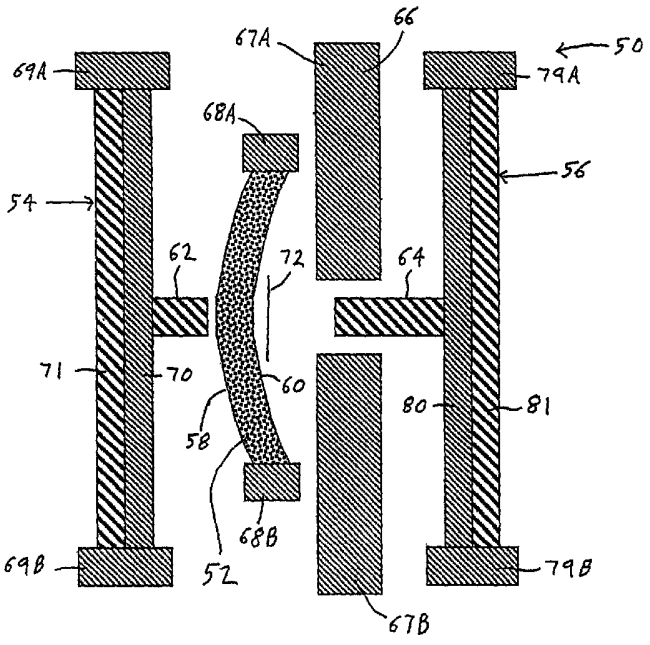
(54) Title: BUCKLING BEAM BI-STABLE MICROELECTROMECHANICAL SWITCH USING ELECTRO-THERMAL ACTUATION



(57) Abstract: A microelectromechanical system (MEMS) that includes a first electro-thermal actuator, a second electro-thermal actuator and a beam having a first side and a second side. The first electro-thermal actuator applies a force to the first side of the beam as current passes through the first electro-thermal actuator and the second electro-thermal actuator applies a force to the second side of the beam as current passes through the second electro-thermal actuator.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H01H61/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 H01H

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 99/16096 A (MAHADEVAN RAMASWAMY ; WOOD ROBERT L (US); MCNC (US); DHULER VIJAYAKUMA) 1 April 1999 (1999-04-01)	1-4,6,7, 9,10,14
A	page 25, line 26 - page 27, line 11; figures 9a-9c,13 page 31, line 28 - page 32, line 18	15,18

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search	Date of mailing of the international search report
28 May 2004	09/06/2004

Name and mailing address of the ISA	Authorized officer
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INTERNATIONAL SEARCH REPORT

Information on patent family members

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