

30/07/02
2002045714

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
9 August 2001 (09.08.2001)

PCT

(10) International Publication Number
WO 01/57900 A1

(51) International Patent Classification⁷: **H01H 50/00**,
1/08

(21) International Application Number: PCT/US01/03305

(22) International Filing Date: 1 February 2001 (01.02.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/179,829 2 February 2000 (02.02.2000) US

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(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ,
DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,
NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,
TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian
patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European
patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE,
IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF,
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

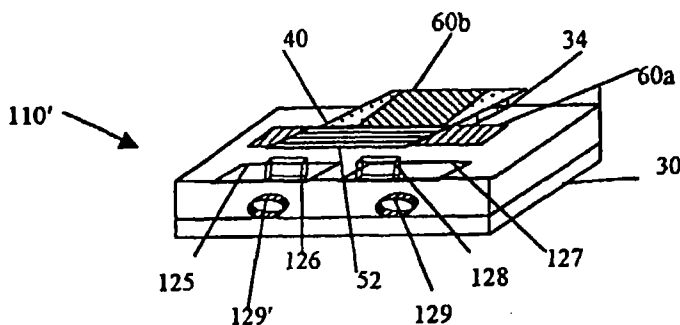


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ACTION

(54) Title: MICROELECTROMECHANICAL MICRO-RELAY WITH LIQUID METAL CONTACTS



(57) Abstract: A MEM relay (110') includes an actuator, a shorting bar (52) disposed on the actuator, a contact substrate, and a plurality of liquid metal contacts (126, 128) are disposed on the contact substrate such that the plurality of liquid metal contacts are placed in electrical communication when the MEM relay is in a closed state. Further, the MEM relay includes a heater (129, 129') disposed on said contact substrate wherein said heater is in thermal communication with the plurality of liquid metal contacts. The contact substrate can additionally include a plurality of wettable metal contacts (125, 127) disposed on the contact substrate

wherein each of the plurality of wettable metal contacts is proximate to each of the plurality of liquid metal contacts (126, 128) and each of the wettable metal contact is in electrical communication with each of the plurality of liquid metal contacts.

WO 01/57900 A1