

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
13 July 2006 (13.07.2006)

PCT

(10) International Publication Number
WO 2006/074352 A3

(51) International Patent Classification:
H01L 21/00 (2006.01)

(21) International Application Number:
PCT/US2006/000433

(22) International Filing Date: 5 January 2006 (05.01.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
11/029,985 5 January 2005 (05.01.2005) US

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,

CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

Published:

- with international search report

(88) Date of publication of the international search report:
23 November 2006

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

(54) Title: MEMS PASSIVATION WITH TRANSITION METALS

(57) Abstract: Organic surfactants are employed to passivate the surfaces of MEMS devices, such as digital micromirrors. The binding of these surfactants to the surface is improved by first associating with the surface transition metal atoms or ions from Groups IVB, VB, and IVB of the periodic table.



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US06/00433

A. CLASSIFICATION OF SUBJECT MATTER

IPC: **H01L 21/00** (2006.01)

USPC: 438/48,38

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)

U.S. : 438/48,38,50,52,53,763,780; 427/96.2,97.1; 257/642

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 practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5,694,740 (MARTIN et al) 9 December 1997 (09.12.1997), entire document.	1-11
A	US 2003/0211650A1 (MARTIN) 13 November 2003 (13.11.2003), entire document.	1-11
A	US 6,674,140 (MARTIN) 6 January 2004 (06.01.2004), entire document.	1-11
A	US 2003/0002019A1 (MILLER) 2 January 2003 (02.01.2003), entire document.	1-11
A	US 2004/0136044A1 (MILLER et al) 15 July 2004 (15.07.2004), entire document.	1-11
A	US 6,335,224 (PETERSON et al) 1 January 2002 (01.01.2002), entire document.	1-11
A	US 6,645,644 (SCHWARTZ et al) 11 November 2003 (11.11.2003), entire document.	1-11



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Date of the actual completion of the international search

01 June 2006 (01.06.2006)

Date of mailing of the international search report

15 AUG 2006

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INTERNATIONAL SEARCH REPORTInternational application No.
PCT/US06/00433**C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2004/0071863A1 (ZHU et al) 15 April 2004 (15.04.2004), entire document.	1-11