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TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
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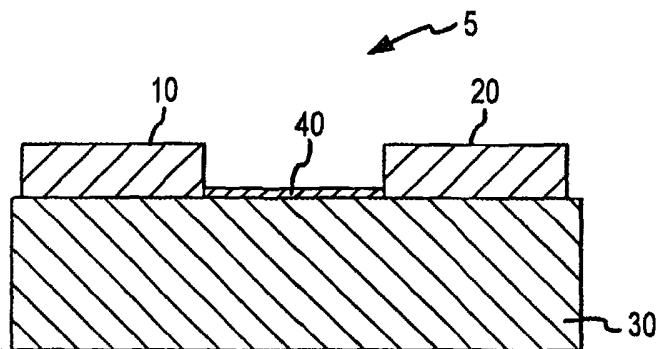
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(54) Title: PROGRAMMABLE SURFACE CONTROL DEVICES AND METHOD OF MAKING SAME



(57) Abstract: Programmable surface control devices whose physical features, such as surface characteristics and mass distribution, are controlled by the presence or absence of an electrodeposition (40) of metal and/or metal ions from a solid solution upon application of a suitable electric field between electrodes (10, 20).



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INTERNATIONAL SEARCH REPORT

 International Application No
 PCT/US 02/34557

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	LEE J ET AL: "Addressable micro liquid handling by electric control of surface tension" TECHNICAL DIGEST MEMS 2001. 14TH IEEE INTERNATIONAL CONFERENCE ON MICRO ELECTRO MECHANICAL SYSTEMS, INTERLAKEN, SWITZERLAND, 21 - 25 January 2001, pages 499-502, XP010534657 ISBN: 0-7803-5998-4 the whole document	1,9, 11-17, 20,21, 26,28-30
A	US 5 992 820 A (FARE THOMAS LOUIS ET AL) 30 November 1999 (1999-11-30) column 7, line 27 -column 9, line 35; figures 4-6	1,9, 13-15, 20,21, 26,30
A	WELTERS W J J ET AL: "Fast electrically switchable capillary effects" LANGMUIR, vol. 14, no. 7, 31 March 1998 (1998-03-31), pages 1535-1538, XP000980065 ISSN: 0743-7463 the whole document	1,13-15, 20,21, 26,30-32
A	WO 99 18456 A (UNIVERSITE JOSEPH FOURIER; BERGE BRUNO; PESEUX JEROME) 15 April 1999 (1999-04-15) -& US 6 369 954 B1 (BERGE BRUNO ET AL) 9 April 2002 (2002-04-09) column 3, line 3 - line 39; figure 1 column 6, line 23 -column 7, line 15	1,15,20, 31,32
A	US 6 290 859 B1 (FLEMING JAMES G ET AL) 18 September 2001 (2001-09-18) column 1, line 12 -column 3, line 40	19,34,35
A	WO 95 00258 A (UNIVERSITY OF CALIFORNIA) 5 January 1995 (1995-01-05) page 3, line 21 -page 6, line 10	19,34,35

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 02/34557

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:

3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-7, 9-18, 20-26, 28-33

Programmable surface control device/method for controlling surface tension of liquid, i.e. hydrophobic/wetting property, and method for forming such device

2. Claims: 8, 19, 27, 34, 35

Method for controlling surface friction, continually renewable metallized surface, and method for continually renewing metallized surface to compensate for wear

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

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