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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
8 April 2004 (08.04.2004)

PCT

(10) International Publication Number
WO 2004/030080 A1

(51) International Patent Classification[7]: H01L 21/66

(21) International Application Number:
PCT/KR2003/001414

(22) International Filing Date: 16 July 2003 (16.07.2003)

(25) Filing Language: Korean

(26) Publication Language: English

(30) Priority Data:
10-2002-0058021
25 September 2002 (25.09.2002) KR

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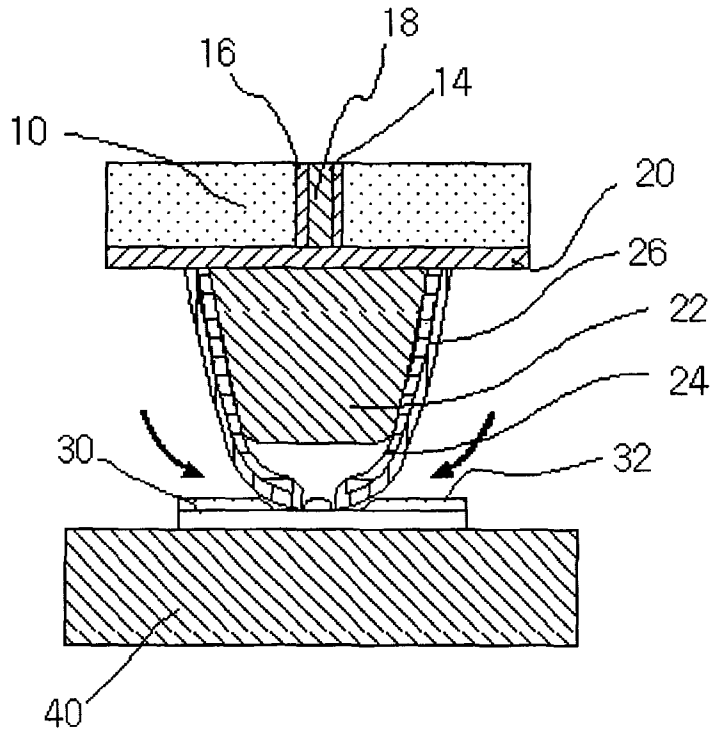
(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO,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

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

Published:
— *with international search report*

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: A HOLLOW MICROPROBE USING A MEMS TECHNIQUE AND A METHOD OF MANUFACTURING THE SAME



(57) Abstract: The present invention relates to a hollow microprobe using an MEMS technique and a method of manufacturing the same. A method of manufacturing a hollow microprobe using an MEMS technique according to the present invention comprises: a step of forming a protection film pattern on a substrate; a step of forming a through hole on the substrate using the protection film pattern as a mask; a step of forming a seed layer on the upper portion of the protection film pattern of the substrate provided with the through hole and an inside wall of the through hole; a step of removing the seed layer of the upper portion of the substrate and the protection film to remain the seed layer only in the inside surface of the though hole, a step of forming a buried conductor within the through of the substrate by an electroplating method; a step of planarizing the top surface of the substrate provided with the buried conductor; a step of forming a base conductive film on the substrate which its top surface is planarized; a step of forming a first tip supporter on the substrate provided with the base conductive film and having a oblique surface sloping down; a step of rounding the top surface of the first tip supporter; a step of forming a second tip supporter; a step of forming a second tip supporter on the outside surface of the first tip supporter to open the top surface of the first tip supporter; a step of forming a conductive material tip on the outside surface of the second tip supporter; and a step of removing the top surface of the opened first tip supporter with a predetermined depth.

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