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(71) Applicant *(for all designated States except US)*: **GENOSPECTRA, INC.** [US/US]; 46540 Fremont Boulevard, Suite 506, Fremont, CA 94538 (US).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **CHEN, Shiping** [GB/US]; 13818 Goosefoot Terrace, Rockville, MD 20850 (US). **LUO, Yuling** [US/US]; 46540 Fremont Boulevard, Suite 506, Fremont, CA 94538 (US). **CHEN, Anthony, C.** [US/US]; 1063 Morris Avenue, Apt. 6307, Sunnyvale, CA 94089 (US).

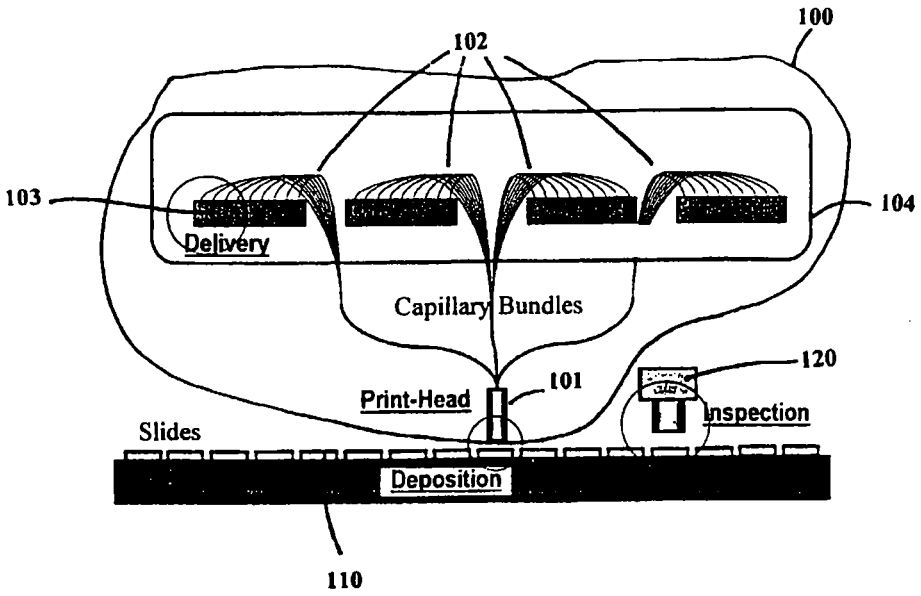
(74) Agents: **HOLLAND, Charles, D.** et al.; Morrison & Foerster LLP, 755 Page Mill Road, Palo Alto, CA 94304-1018 (US).

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(54) Title: MICROARRAY FABRICATION TECHNIQUES AND APPARATUS



(57) Abstract: Disclosed is a microarray printing system (100) and methods of printing probe microarrays (1101). The system has a print head (101, 200, 805, 1003, 1700, 1800, 1900) formed of one or more bundles (201-221, 604) of individual capillaries, (102, 301, 402a, 402b, 502a, 502b, 603a, 603b, 802) such as light-guiding capillaries. The bundles may especially be random bundles of capillaries that provide a large number of probes (807, 1006a, 1006b, 1206) on the surface of a substrate. Methods of registering or correlating the distal and proximal ends of the capillaries are also provided. Further, the invention provides methods and equipment for identifying defective microarrays that are missing one or more probes from the surface of the microarray.

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