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(71) **Applicant** (*for all designated States except US*): **NANONEXUS, INC.** [US/US]; 2520 Junction Avenue, San Jose, CA 95134 (US).

(72) Inventors; and

(75) **Inventors/Applicants (for US only): CHONG, Fu, Chiung** [MY/US]; 19743 Glen Brae Drive, Saratoga, CA 95070 (US). **KAO, Andrew, S.** [US/US]; 45978 Tissiac

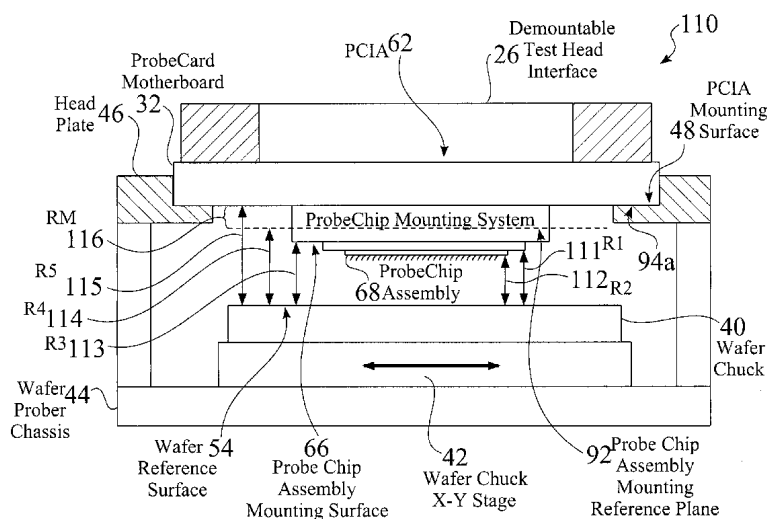
Place, Fremont, CA 94539 (US). **MCKAY, Douglas** [US/US]; 2039 Cirone Way, San Jose, CA 95124 (US). **LITZA, Anna** [US/US]; 20350 Stevens Creek Blvd. #306, Cupertino, CA 95014 (US). **MODLIN, Douglas** [US/US]; 4063 Scripps Avenue, Palo Alto, CA 95112 (US). **MOK, Sammy** [CA/US]; 106360 East Estates Drive, Cupertino, CA 95014 (US). **PAREKH, Nitin, S.** [US/US]; 1280 Windimer Drive, Los Altos, CA 94024 (US). **SWIA-TOWIEC, Frank, John** [US/US]; 7260 Scarsdale Place, San Jose, CA 95120 (US). **SHAN, Zhaohui** [CN/US]; 4291 Norwalk Drive V303, San Jose, CA 95129 (US).

(74) Agents: GLENN, Michael, A. et al.; Glenn Patent Group, 3475 Edison Way, Ste. L., Menlo Park, CA 94025 (US).

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(54) Title: HIGH DENSITY INTERCONNECT SYSTEM HAVING RAPID FABRICATION CYCLE



(57) Abstract: An improved interconnection system and method is described, such as for connectors, socket assemblies and/or probe card systems. An exemplary system comprises a probe card interface assembly (PCIA) (62) for establishing electrical connections to a semiconductor wafer mounted in a prober. The PCIA (62) comprises a motherboard (32) parallel to the semiconductor wafer having an upper surface and an opposing lower planar mounting surface (94a), a reference plane (92) defined by at least three points located between the lower surface (94a) of the motherboard (32) and the wafer, at least one component located below the motherboard mounting surface, and a mechanism for adjusting the planarity of the reference plane (92) with respect to the wafer. A probe chip (68) having a plurality of spring probes extending therefrom is mountable and demountable from the PCIA (62), without the need for further planarity adjustment. The interconnection structures and methods preferably provide improved fabrication cycles.

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