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(71) Applicant (for all designated States except US): **NVIDIA CORPORATION** [US/US]; 2701 San Tomas Expressway, Santa Clara, CA 95050 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **DIAMOND, Michael, B.** [US/US]; 164 A Belwood Court, Los Gatos,

CA 95032 (US). **MONTRYM, John, S.** [US/US]; 10451 Serra Street, Cupertino, CA 95014 (US). **VAN DYKE, James, M.** [US/US]; 10608 Glass Mountain Trail, Austin, TX 78750 (US). **NAGY, Michael, B.** [US/US]; 29303 Whitingham Court, Agoura Hills, CA 91301 (US). **TRE-ICHLER, Sean, J.** [US/US]; 1141 Katie Court, Mountain View, CA 94040 (US).

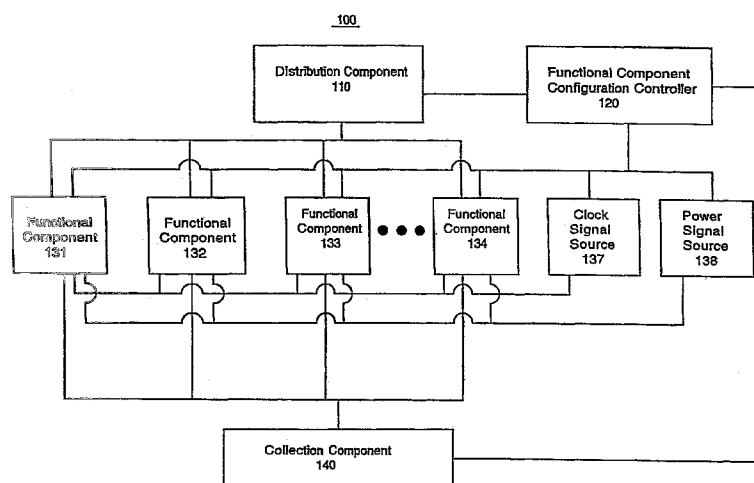
(74) Agents: **GALLENSON, Mavis, S.** et al.; 5670 Wilshire Boulevard, Suite 2100, Los Angeles, CA 90036-5679 (US).

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[Continued on next page]

(54) Title: A SYSTEM AND METHOD FOR TESTING AND CONFIGURING SEMICONDUCTOR FUNCTIONAL CIRCUITS



(57) Abstract: Disclosed here are systems and methods to enable configuration of functional components in integrated circuits. A present invention system and method can flexibly change the operational characteristics of functional components in an integrated circuit die based upon a variety of factors including manufacturing defects, compatibility characteristics, performance requirements, and system health (e.g., the number of components operating properly). Functional component operational behavior is tested and analyzed at various levels of configuration abstraction and component organization (e.g., topological inversion analysis). The testing and analysis can be performed in parallel on numerous functional components. Functional component configuration related information is presented in a graphical user interface (GUI) at various levels of granularity and in real time. The graphical user interface can facilitate user interaction in recognizing failure patterns, production test tuning and field configuration algorithm adjustment. The testing and analysis information can also be organized in a variety of convenient database formats.

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