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(71) Applicant *(for all designated States except US)*: **MURATEC AUTOMATION CO., LTD.** [JP/JP]; 3, Minami-Ochiai-Cho, Kisshoin, Minami-Ku, Kyoto, 601-8326 (JP).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **SHIEH, Karl** [US/US]; 46897 Bayside Parkway, Fremont, CA 94538 (US). **COOKSON, Michael, A .** [US/US]; 46897 Bayside Parkway, Fremont, CA 94538 (US). **RILEY, Norma, B .** [US/US]; 46897 Bayside Parkway, Fremont, CA 94538 (US). **WRIGHT, Donald, Rex** [US/US]; 46897 Bayside Parkway, Fremont, CA 94538 (US). **FATULA, Joseph, John** [US/US]; 46897 Bayside Parkway, Fremont, CA 94538 (US).

(74) Agent: **DEVLIN, Timothy**; Fish & Richardson P.C., P.O. Box 1022, Minneapolis, MN 55440-1022 (US).

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(54) **Title**: VAO PRODUCTIVITY SUITE

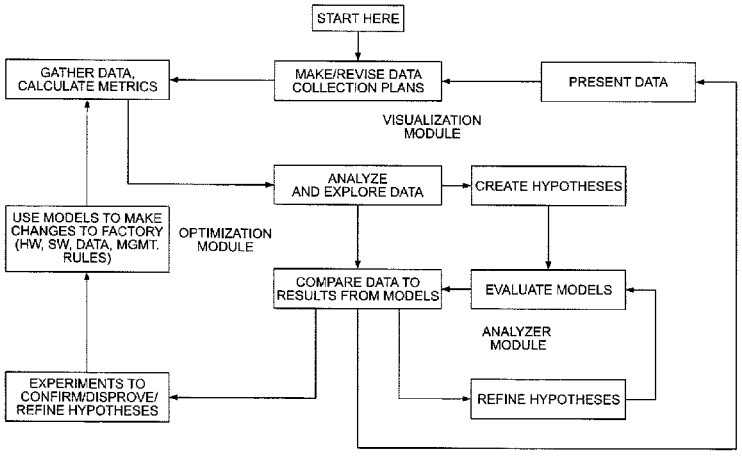


FIG. 1A

(57) **Abstract**: A semiconductor fabrication facility (fab) configuration module is defined to virtually model physical systems and attributes of a fab. A data acquisition module is defined to interface with the physical systems of the fab and gather operational data from the physical systems. A visualizer module is defined to collect and aggregate the operational data gathered from the physical systems. The visualizer module is further defined to process the operational data into a format suitable for visual rendering. The processed operational data is displayed within a visual context of the fab in a graphical user interface controlled by the visualizer module. An analyzer module is defined to analyze data collected by the visualizer module and to resolve queries regarding fab performance. An optimizer module is defined to control systems within the fab in response to data collected by the visualizer module, data generated by the analyzer module, or a combination thereof.

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