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(71) Applicant: MEMC ELECTRONIC MATERIALS, INC. [US/US]; 501 Pearl Drive, P.O. Box 8, St. Peters, MO 63376 (US).

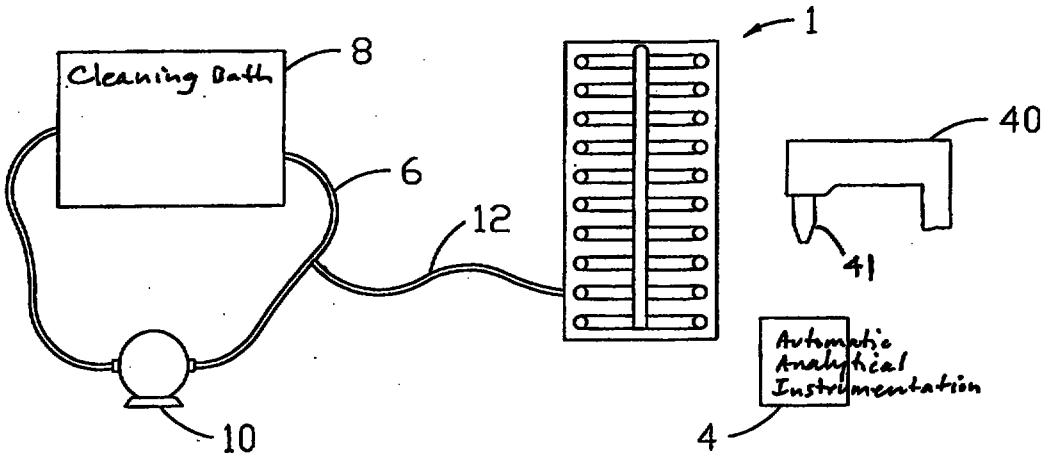
(72) Inventors: MORI, Erik, J.; 3563 Investment Building, Building E-6, Hayward, CA (US). SHIVE, Larry, W.; 5 Ardennais Street, St. Peters, MO 63376 (US). SCHMIDT, Philip, R.; 532 Crown Passage Drive, St. Charles, MO 63303 (US).

(74) Agents: HEJLEK, Edward, J. et al.; Senniger, Power, Leavitt & Roedel, 16th floor, One Metropolitan Square, St. Louis, MO 63102 (US).

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(54) Title: PROCESS FOR MONITORING THE CONCENTRATION OF METALLIC IMPURITIES IN A WAFER CLEANING SOLUTION



(57) Abstract

A process for determining the concentration of trace alkali or alkaline earth metal impurities in a silicon wafer cleaning solution which is maintained in continuous flow through a bath (8). The process comprises continuously delivering from the flow of cleaning solution a portion of that solution into and through a sample cell (1). A sample of the solution is then withdrawn (41) and analyzed (4) in order to determine the concentration of trace alkali, alkaline earth or transition metal impurities in the cleaning bath solution. Additionally, a comparison may be made between the concentration of impurities in the cleaning solution and an empirically determined correlation, in order to determine if the concentration of impurities on a silicon wafer surface exceeds about 1×10^{10} atoms/cm^2.