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(54) Title: UTILIZING ELECTROCHEMICAL ANALYTICAL METHODS TO MEASURE PLATING BATH BREAKDOWN PRO-
DUCTS SUCH AS MPSA TO DETECT CHEMISTRY PROBLEMS PRIOR TO HAVING AN IMPACT ON WAFER LEVEL PRO-
CESS PERFORMANCE

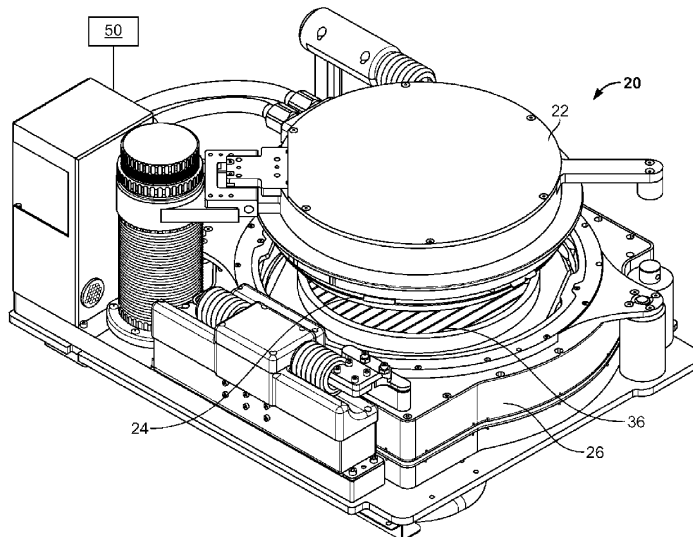


FIG. 1A

(57) Abstract: A method of controlling quality of electroplating a wafer having one or more through silicon via (TSV) features, the method including placing a wafer in contact with a bath, wherein the bath comprises an accelerator, and a leveler, suppressor, or a combination thereof, passing electrical current from one or more anodes through the bath and through a conductive layer on the wafer, monitoring a voltage of the one or more anodes by one or more computer processors, and declaring an upcoming failure event of the bath based on a predetermined threshold of voltage by the one or more controllers.

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