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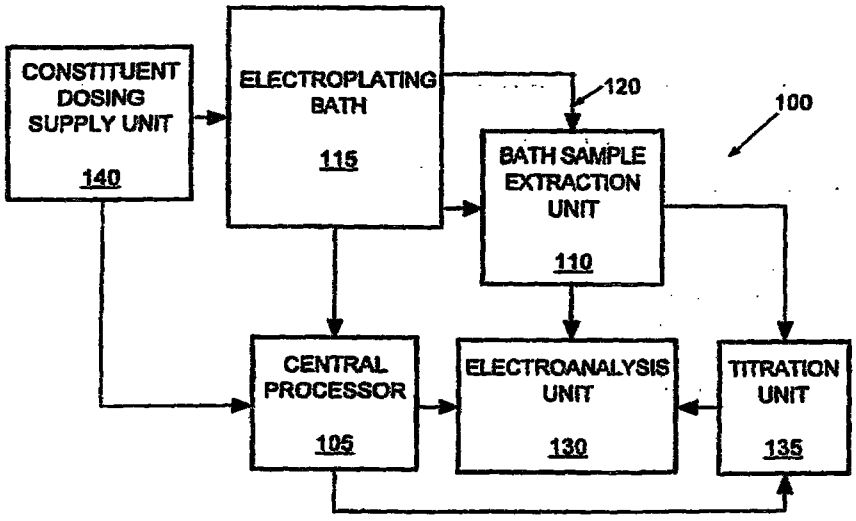
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(54) Title: MEASURING ADDITIVE CONCENTRATION IN AN ELECTROPLATING BATH



(57) Abstract

A method for measuring a target constituent of an electroplating solution using an electroanalytical technique is set forth in which the electroplating solution includes one or more constituents whose by–products skew an initial electrical response to an energy input of the electroanalytical technique. The method comprises a first step in which an electroanalytical measurement cycle of the target constituent is initiated by providing an energy input to a pair of electrodes (10, 20) disposed in the electroplating solution. The energy input to the pair of electrodes is provided for at least a predetermined time period corresponding to a time period in which the electroanalytical measurement cycle reaches a steady–state condition. In a subsequent step, an electroanalytical measurement of the energy output of the electroanalytical technique is taken after the electroanalytical measurement cycle has reached the steady–state condition. The electroanalytical measurement is then used to determine an amount of the target constituent in the electroplating solution. An automatic dosing system (100) that includes the foregoing method and/or one or more known electroanalytical techniques in a close–loop system is also set forth.