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(71) Applicant: **BUCKMAN LABORATORIES INTERNATIONAL, INC.** [US/US]; 1256 North Mclean Boulevard, Memphis, TN 38108-0305 (US).

(72) Inventors: **MCNEEL, Thomas, E.**; c/o Buckman Laboratories International, Inc., 1256 North Mclean Boulevard, Memphis, TN 38108-0305 (US). **CLARK, Richard, A.**; c/o Buckman Laboratories International, Inc., 1256 North Mclean Boulevard, Memphis, TN 38108-0305 (US). **LUSK, JR. Richard, D.**; c/o Buckman Laboratories International, Inc., 1256 North Mclean Boulevard, Memphis, TN 38108-0305 (US). **LIYANAPATIRANA, Chamindu**; c/o Buckman Laboratories International, Inc., 1256 North Mclean Boulevard, Memphis, TN 38108-0305 (US).

(74) Agent: **KILYK, Luke, A.**; Kilyk & Bowersox, P.L.L.C., 400 Holiday Court, Suite 102, Warrenton, VA 20186 (US).

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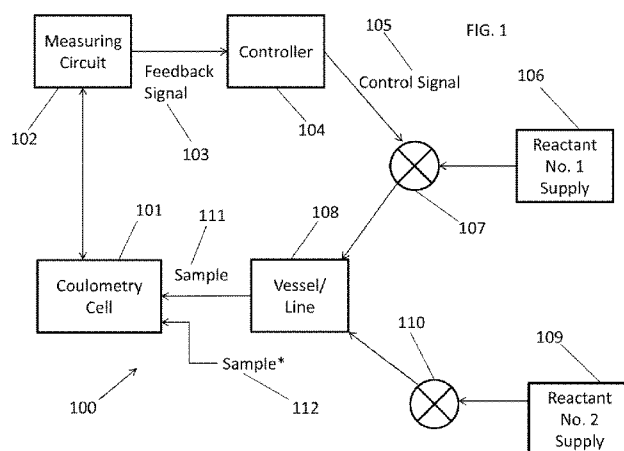
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(54) Title: METHOD AND APPARATUS FOR MEASURING AND CONTROLLING ELECTROLYTICALLY-ACTIVE SPECIES CONCENTRATION IN AQUEOUS SOLUTIONS



(57) Abstract: A method is provided for measuring an electrolytically-active species concentration in an aqueous or non-aqueous solution for use in providing control of the concentration of the species in a source solution thereof based on the measurements. In the method, a sample containing an electrolytically-active species is added into a measurement cell that has a working electrode and an auxiliary electrode, and a constant current is applied to the measurement cell while the working and auxiliary electrodes are in contact with the sample with monitoring of voltage difference across the electrodes until a change in the voltage difference is detected. A feedback signal is generated based on a parameter of the change in the voltage difference that is directly proportional to the amount of the electrolytically-active species in the sample, which can be used for process control. An apparatus is also described.



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