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Has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.

Therefore, this

United States Patent

Grants to the person(s) having title to this patent the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States of America or importing the invention into the United States of America, and if the invention is a process, of the right to exclude others from using, offering for sale or selling throughout the United States of America, or importing into the United States of America, products made by that process, for the term set forth in 35 U.S.C. 154(a)(2) or (c)(1), subject to the payment of maintenance fees as provided by 35 U.S.C. 41(b). See the Maintenance Fee Notice on the inside of the cover.

Michelle K. Lee

Director of the United States Patent and Trademark Office



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(54) **DETECTOR FOR DETECTING SODIUM HYPOCHLORITE CONCENTRATION**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 178 days.

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(58) **Field of Classification Search**

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See application file for complete search history.

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(57) **ABSTRACT**

A detector for detecting sodium hypochlorite concentration includes a first electrode, a second electrode and a processing unit. The first electrode and the second electrode are disposed opposite each other, and are soaked in a sodium hypochlorite solution under detection. An electrical path is formed among the first electrode, the sodium hypochlorite solution and the second electrode. The processing unit, electrically connected to the first electrode and the second electrode, measures a plurality of ions in the sodium hypochlorite solution transmitted in the electrical path to obtain a conductivity of the sodium hypochlorite solution and to accordingly calculate concentration of the sodium hypochlorite solution. Compared to a conventional measurement apparatus adopting an optical detector, the invention not only can be fabricated at low production costs, but also can instantly obtain the detected concentration without involving analysis of an externally connected computer.

10 Claims, 5 Drawing Sheets

