

EXHIBIT 1011:

U.S. PAT. NO. 5,004,998 TO HORII. (“HORII (‘998)’”)

Pharmatech Solutions, Inc.: EXHIBIT 1011  
REQUEST FOR *INTER PARTES* REVIEW

[54] ION-MEASURING APPARATUS FOR USE IN PROCESS

[75] Inventor: Yoshio Horie, Miyano Higashi, Japan  
[73] Assignee: Horiba, Ltd., Kyoto, Japan  
[21] Appl. No.: 447,221  
[22] Filed: Dec. 7, 1989

[30] Foreign Application Priority Data

Dec. 14, 1988 [JP] Japan ..... 63-316778

[51] Int. Cl.<sup>5</sup> ..... G08B 21/00; G01N 27/26

[52] U.S. Cl. .... 340/507; 204/401;  
324/537; 364/497; 364/551.01

[58] Field of Search ..... 204/401, 416, 433, 412,  
204/406; 364/497, 551.01; 324/438, 512, 537;  
73/1 R; 340/506, 537, 507

[56] References Cited

U.S. PATENT DOCUMENTS

4,337,516 6/1982 Murphy et al. .... 364/551.01  
4,402,054 8/1983 Osborne et al. .... 364/551.01 X  
4,686,011 8/1987 Jäckle ..... 204/401 X  
4,734,184 3/1988 Burleigh et al. .... 204/409  
4,777,444 10/1988 Beijj et al. .... 324/439

FOREIGN PATENT DOCUMENTS

637538 1/1964 Belgium .  
3220327 12/1982 Fed. Rep. of Germany .

Primary Examiner—G. L. Kaplan  
Attorney, Agent, or Firm—Price, Gess & Ubell

[57] ABSTRACT

An ion-measuring apparatus for use in processes, characterized by comprising 3 or more ion-measuring electrodes for measuring a same one ion contained in a same one sample, means for computing a mean value of measured values obtained by means of said ion-measuring electrodes, an indicating portion for indicating the computed result, means for judging an existence of an abnormality in the ion-measuring electrodes and an alarm for emitting a maintenance alarm when the abnormality occurs in any one of the ion-measuring electrodes so that the ion-measuring electrode, which has been judged to be abnormal, may be excluded to continue a measurement by means of remaining ion-measuring electrodes.

24 Claims, 10 Drawing Sheets

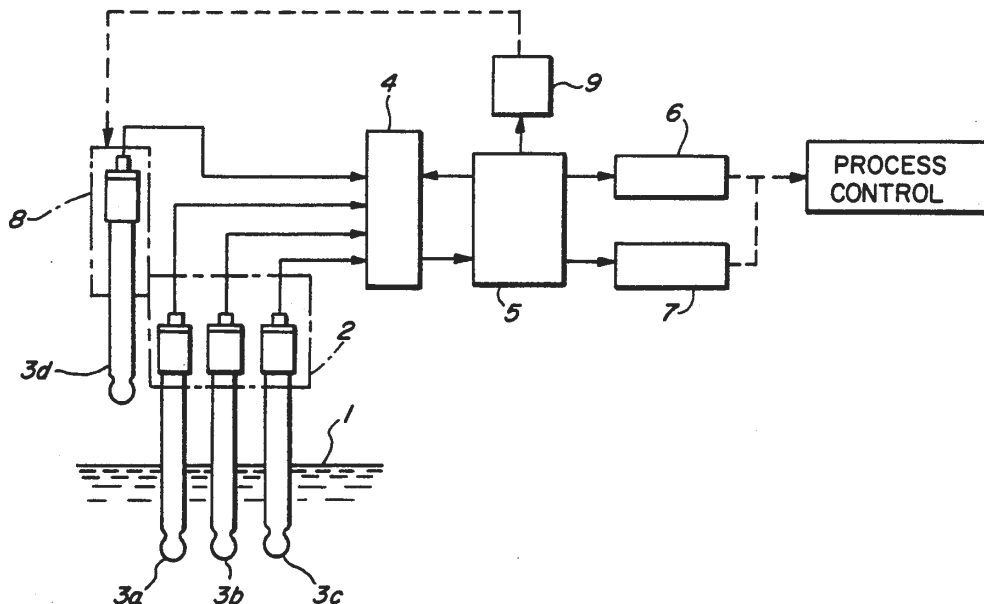


FIG. 1

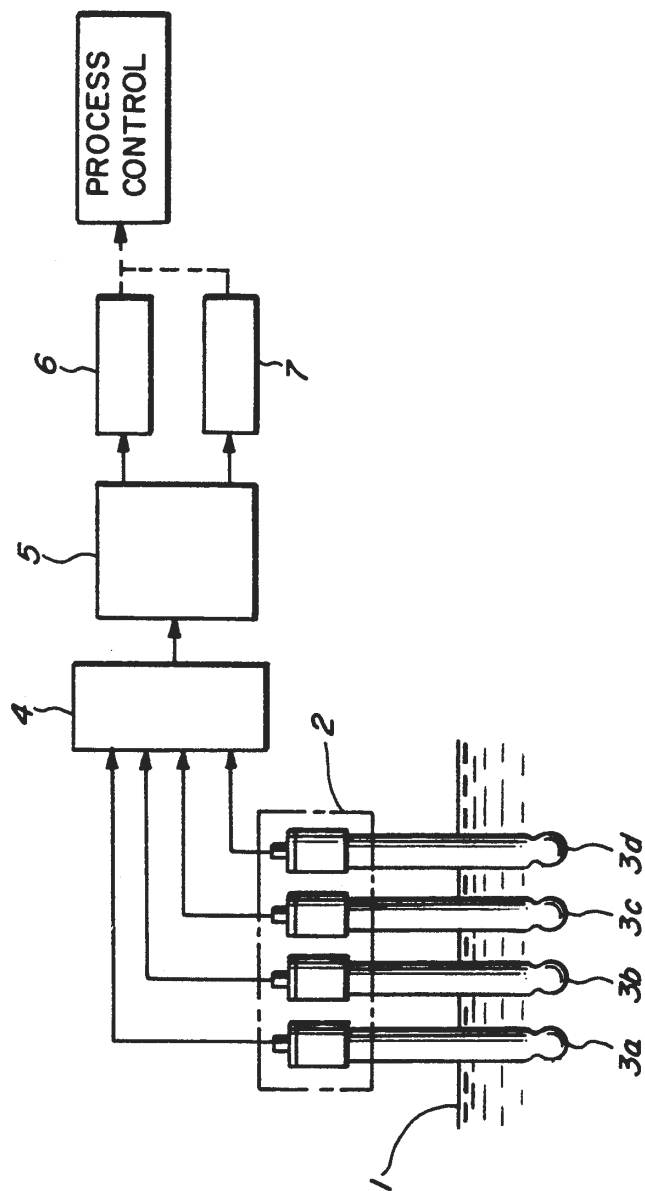


FIG. 2

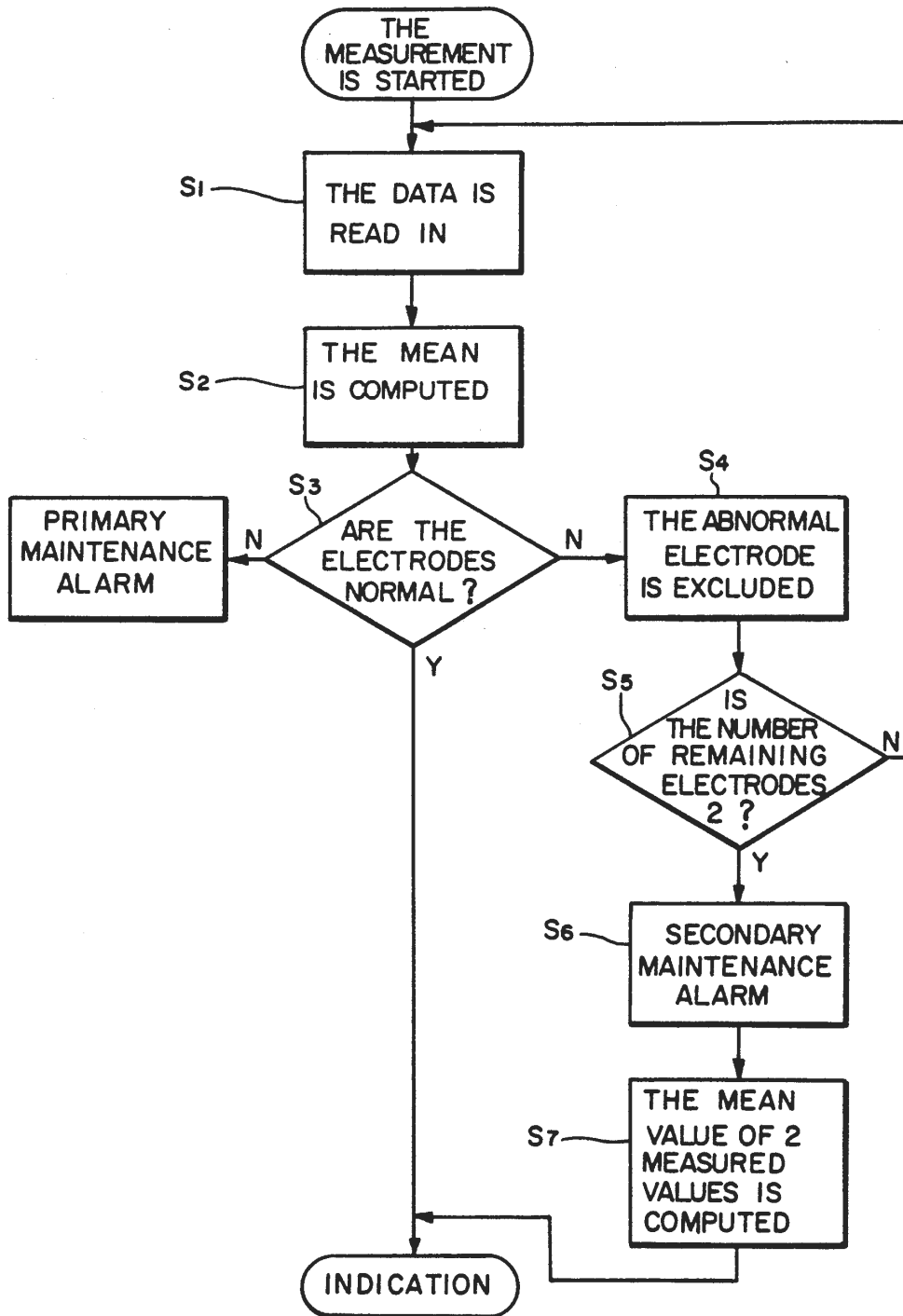
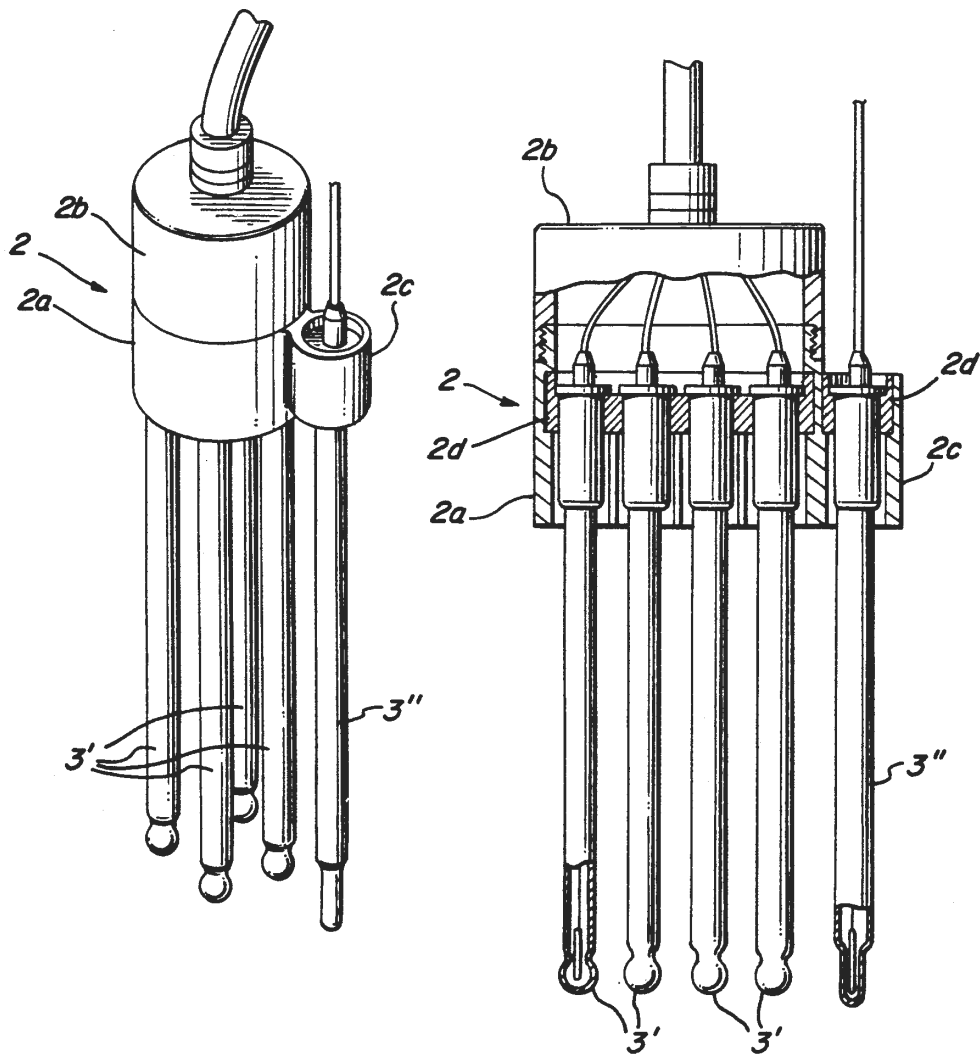


FIG. 3

FIG. 4



# Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

## Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

## Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

## Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

## API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

## LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

## FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

## E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.