

## United States Patent [19]

### Charm et al.

### [54] TEST DEVICE FOR DETECTION OF AN ANALYTE

- [75] Inventors: Stanley E. Charm, Boston; Richard Skiffington, North Reading; Robert J. Markovsky, Amesbury; Eliezer Zomer, Newton, all of Mass.
- [73] Assignee: Charm Sciences, Inc., Malden, Mass.
- [21] Appl. No.: 09/001,775
- [22] Filed: Dec. 31, 1997

### [56] References Cited

U.S. PATENT DOCUMENTS

4,700,714 10/1987 Fuisz .

RM

### US005985675A

### [11] Patent Number: 5,985,675

### [45] Date of Patent: Nov. 16, 1999

10/1987	Campbell et al
5/1989	Guire et al 435/4
3/1991	Stisco .
8/1993	Sun et al
11/1993	Patel et al 436/180
11/1993	Imai et al
1/1997	Rosenstein .
4/1997	May et al
	5/1989 3/1991 8/1993 11/1993 11/1993 1/1997

### OTHER PUBLICATIONS

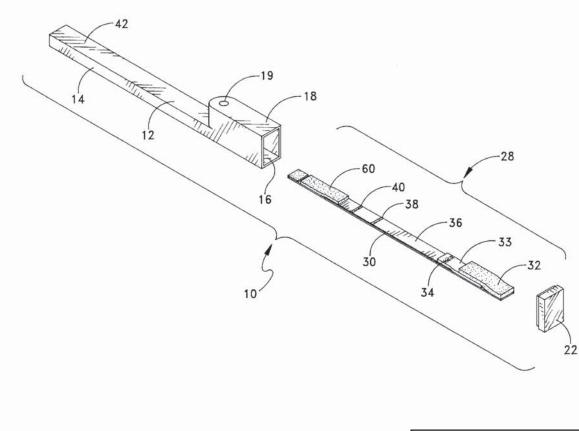
"A Short Guide—Developing Immunochromatographic Test Strips"; 1996, Lit. No. TB500, Millipore Corporation, Bedford, MA, USA.

Primary Examiner—Christopher L. Chin Assistant Examiner—Bao-Thuy L. Nguyen Attorney, Agent, or Firm—Richard P. Crowley

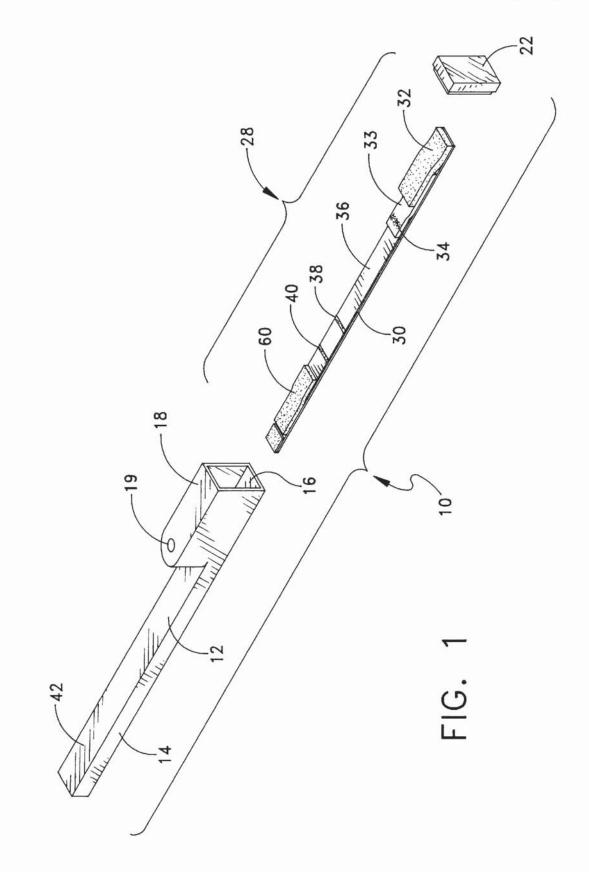
### [57] ABSTRACT

A test device, system and method, the device composed of an elongated, toothbrush-shaped, transparent, plastic housing and a lateral-flow test strip for the detection of an analyte, such as a beta-lactam in milk, in the housing, the housing having an expansion cavity to receive expanded, liquid-contacted, absorbing material in the test strip, and to control lateral flow rate and times in the test strip.

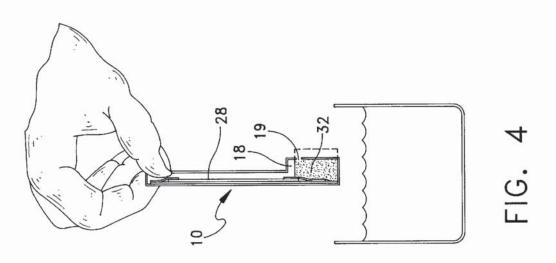
#### 20 Claims, 7 Drawing Sheets

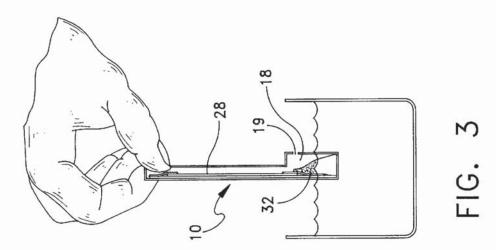


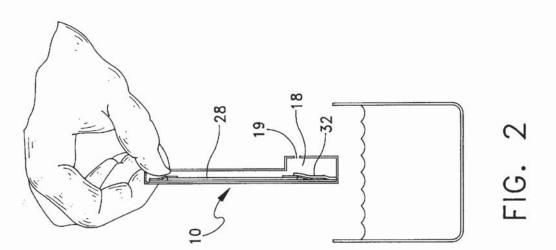
AIEDEEV 1000



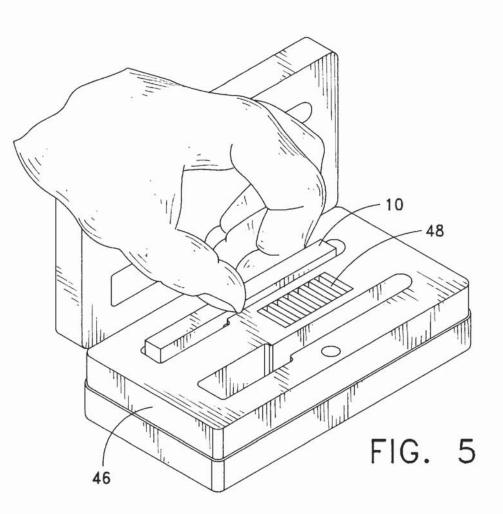
**DOCKET A L A R M** Find authenticated court documents without watermarks at <u>docketalarm.com</u>.

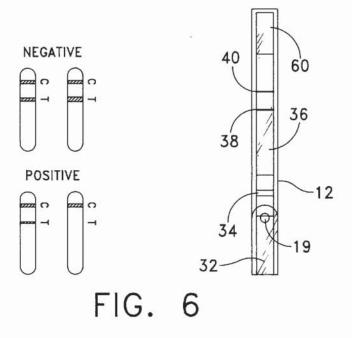






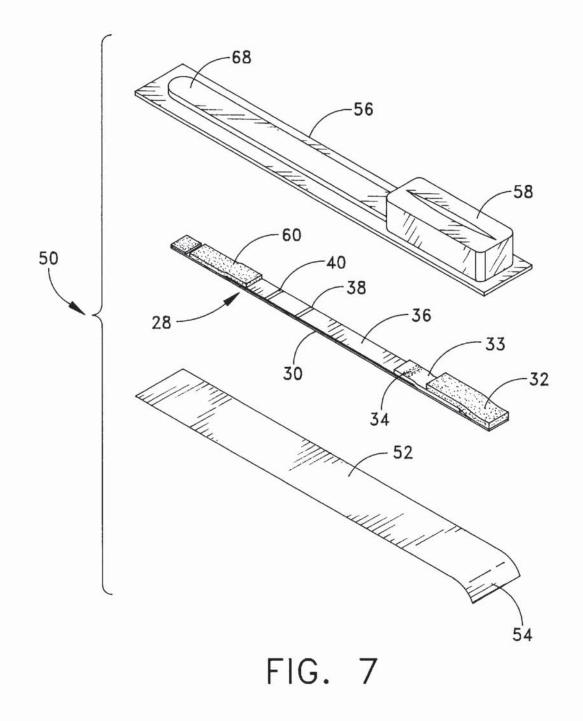
**DOCKET A L A R M** Find authenticated court documents without watermarks at <u>docketalarm.com</u>.





DOCKET LARM Find authenticated court documents without watermarks at docketalarm.com.

Α



DOCKET LARM Α Find authenticated court documents without watermarks at <u>docketalarm.com</u>.

# DOCKET A L A R M



# 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.