



US005985675A

**United States Patent** [19]

Charm et al.

[11] **Patent Number:** 5,985,675[45] **Date of Patent:** Nov. 16, 1999[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**[51] **Int. Cl.<sup>6</sup>** ..... **G01N 33/533**[52] **U.S. Cl.** ..... **436/514; 422/56; 422/58; 422/187; 422/188; 422/104; 422/110; 422/278; 435/7.1; 435/7.2; 435/7.8; 435/7.92; 435/7.94; 435/7.95; 435/174; 435/287; 435/970; 435/971; 435/7.93; 436/518; 436/524; 436/538; 436/530; 436/535; 436/533; 436/810; 436/807**[58] **Field of Search** ..... 422/56, 58, 187, 422/188, 104, 110, 278; 435/7.1, 7.2, 7.8, 7.92, 7.94, 7.95, 174, 287.1, 970, 971, 7.93; 436/518, 524, 538, 530, 535, 533, 810, 807[56] **References Cited****U.S. PATENT DOCUMENTS**

4,700,714 10/1987 Fuisz .

4,703,017	10/1987	Campbell et al. .	
4,826,759	5/1989	Guire et al. ....	435/4
4,999,285	3/1991	Stisco .	
5,238,652	8/1993	Sun et al. .	
5,260,222	11/1993	Patel et al. ....	436/180
5,266,497	11/1993	Imai et al. .	
5,591,645	1/1997	Rosenstein .	
5,622,871	4/1997	May et al. .	

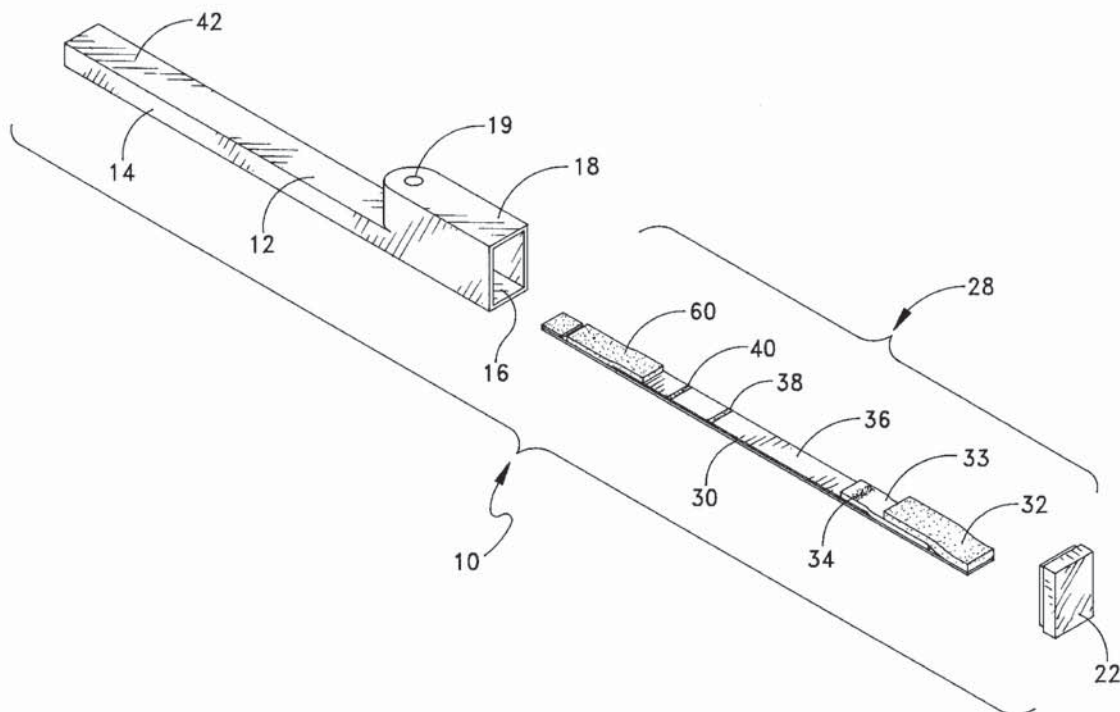
**OTHER PUBLICATIONS**

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

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[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**

ALERE EX 1008

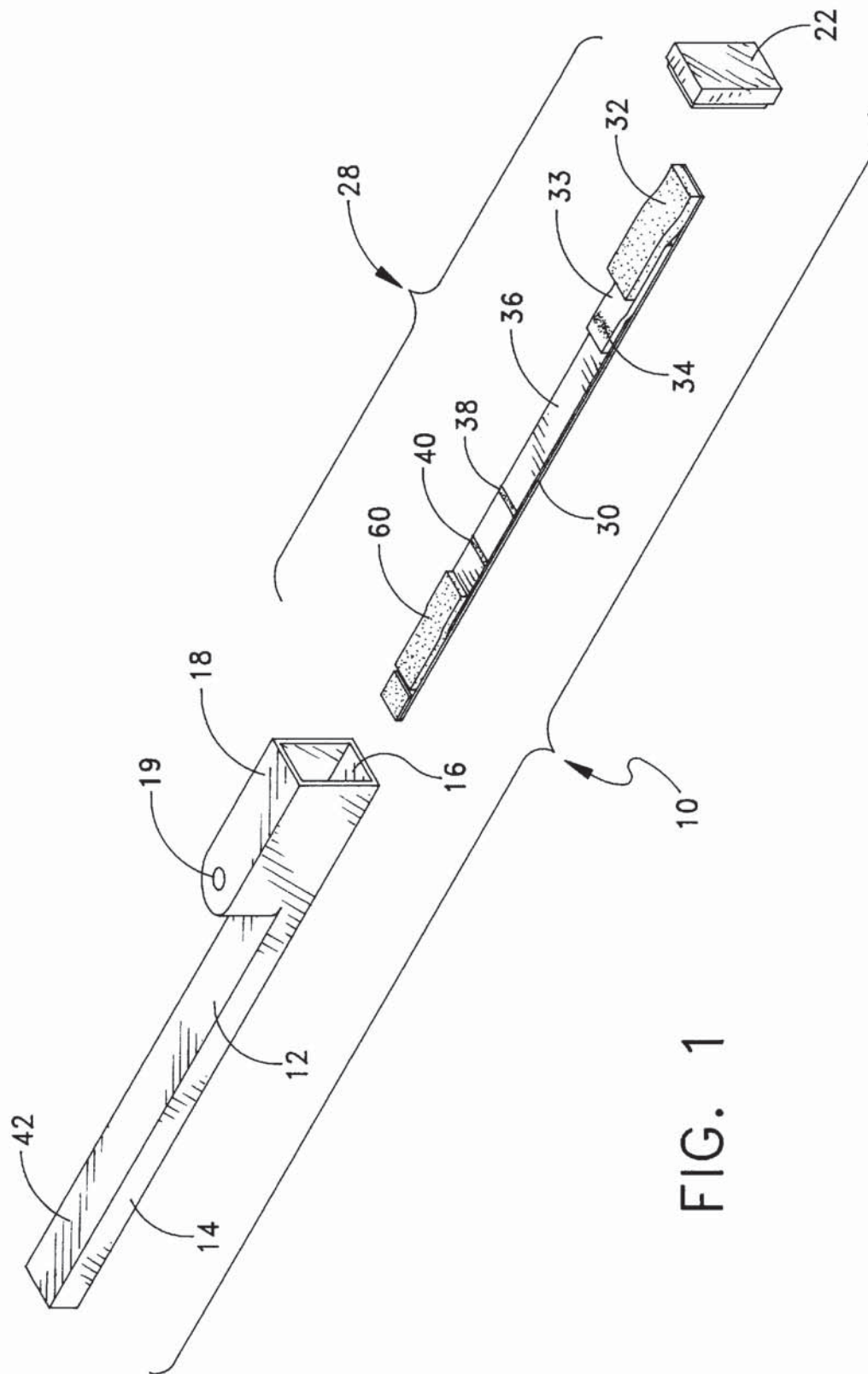


FIG. 1

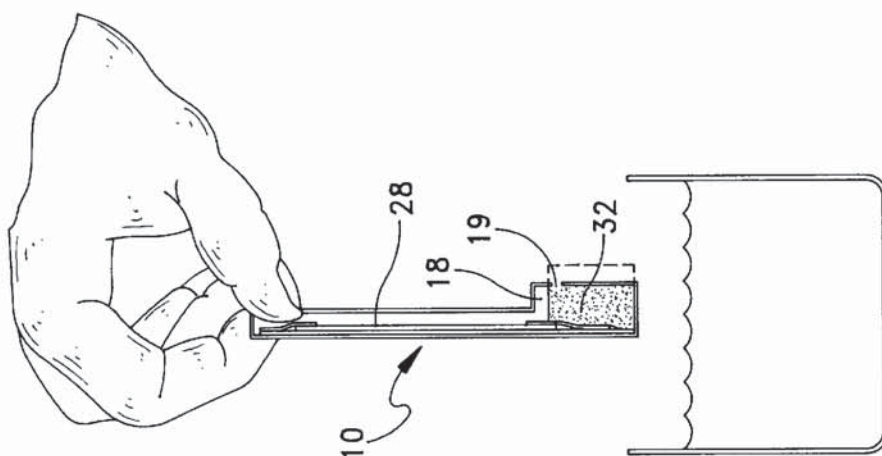


FIG. 4

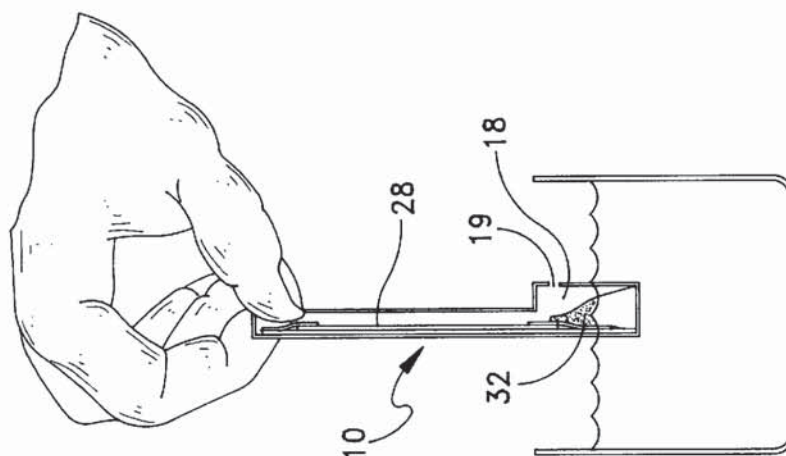


FIG. 3

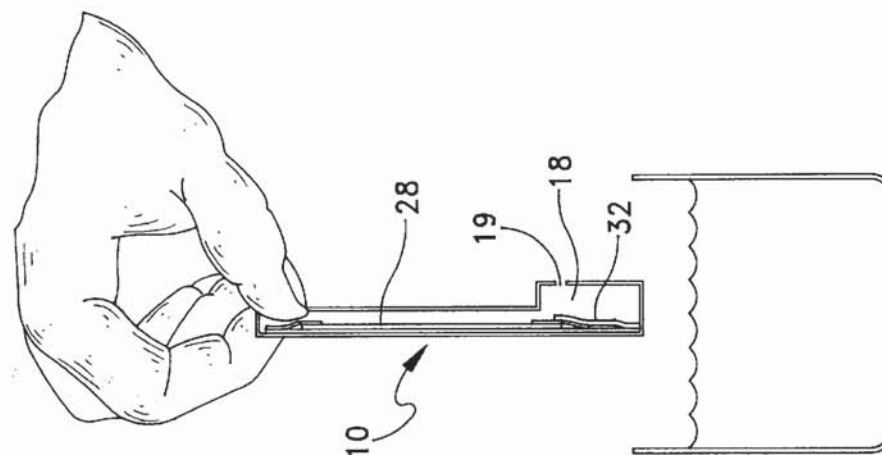


FIG. 2

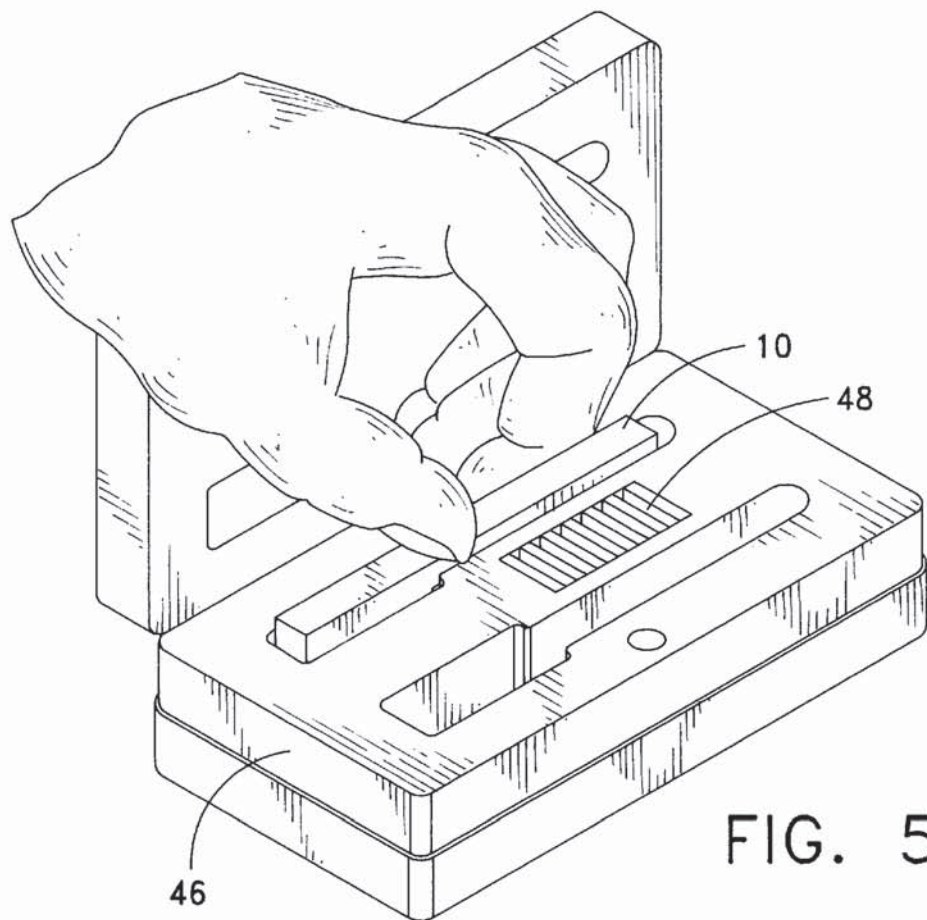


FIG. 5

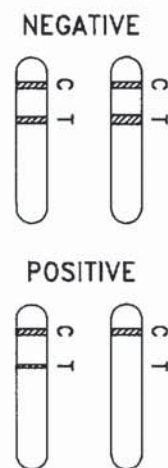


FIG. 6

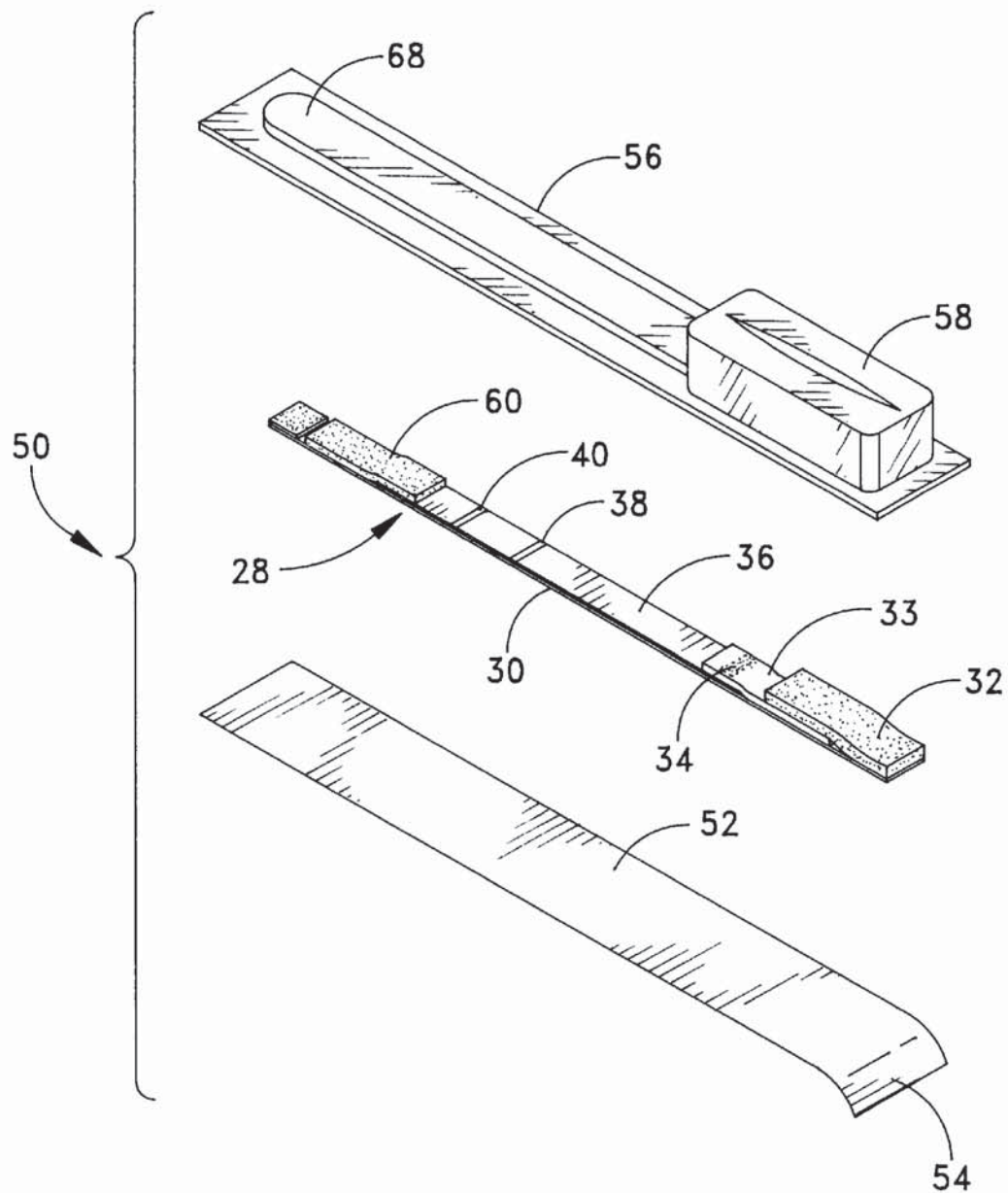


FIG. 7



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