[45]

Oct. 6, 1981

[54]	TOUCH PANEL SYSTEM AND METHOD		
[75]	Inventor:	William Pepper, Jr., Bethesda, Md.	
[73]	Assignee:	$\label{eq:Peptek} \textbf{Peptek, Incorporated, } Bethesda, \ Md.$	
[21]	Appl. No.:	14,450	
[22]	Filed:	Feb. 23, 1979	
[51]	Int. Cl.3	G08C 21/00; G01N 27/00	
[52]	U.S. Cl		
[58]		rch 178/18, 19, 20;	
-	340/365	R, 365 S, 365 C, 365 A, 146.3 SY, 347	
	AD; 33,	/1 M; 250/207, 211 R, 211 K; 324/71	
		R, 71 EB	

#### [56] References Cited

## U.S. PATENT DOCUMENTS

3,691,382	9/1972	Somer 250	/211 K
3,699,439	10/1972	Turner	178/18
4,013,835	3/1977	Eachus et al	178/18
4,018,989	4/1977	Snyder et al	178/18
4,071,691	1/1978	Pepper, Jr	178/19
4,121,049	10/1978	Roeber	178/18
4,129,747	12/1978	Pepper, Jr	178/19
4,138,592	2/1979	Capehart et al	178/19
4,198,539	4/1980	Pepper, Jr	178/18

### FOREIGN PATENT DOCUMENTS

1133757 11/1968 United Kingdom .

### OTHER PUBLICATIONS

"What You Can Do With Just 10,000 Electrons", Bro-

chure by Surface Science Laboratories; pages not numbered; before 1/1/79.

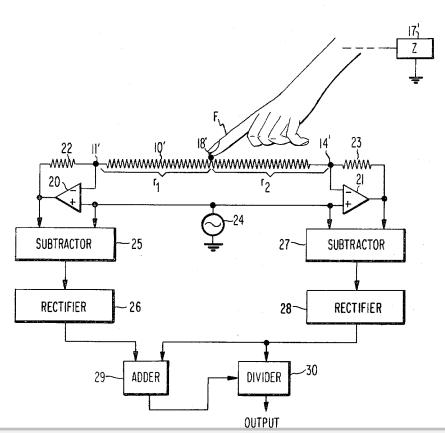
"A Position-sensitive Detector for Electrons", Moak and others; 1975; Journal of Electron Spectroscopy . . . , Netherlands; pp. 151-156.

Primary Examiner-Thomas A. Robinson Attorney, Agent, or Firm-Jim Zegeer

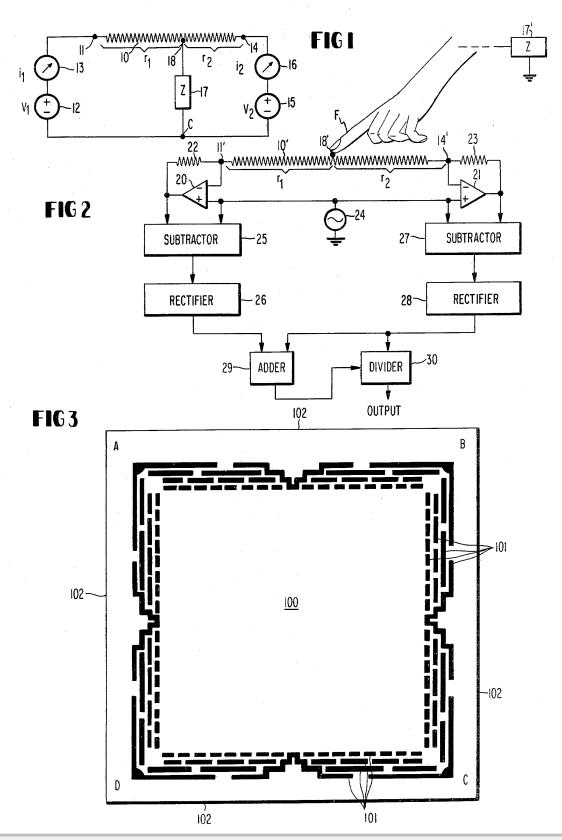
#### **ABSTRACT** [57]

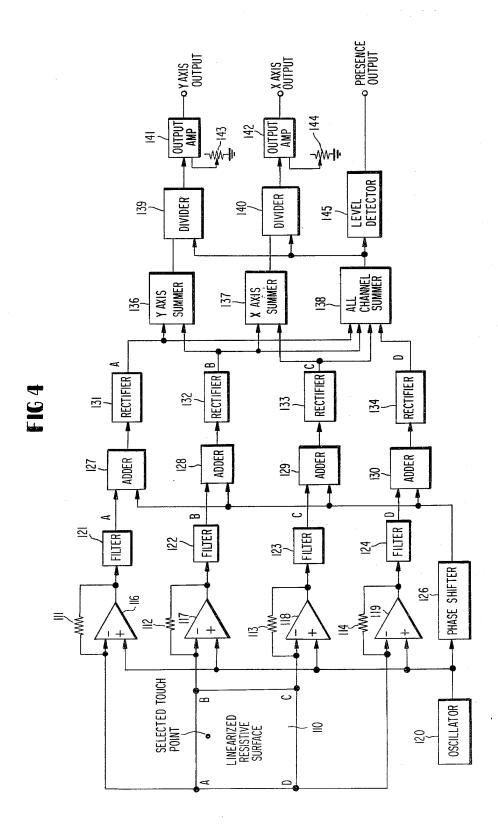
A general method is disclosed for accurately determining the location or position of a source or sink of electric current on the surface of a resistance element or impedance layer. Touch panels are described that detect the presence of a user's finger on such surface, and produce output signals corresponding to the position of the finger in one or more axes. A preferred embodiment discloses a touch panel that includes a signal generator and determines the position of the user's finger from current flowing through the user's body to ground. Another touch panel embodiment determines the position of the user's finger from currents caused by ambient electrical noise. A pressure-sensitive touch panel, a transparent touch panel for use with a video display, a touch-panelcontrolled audio mixer, and a video game incorporating touch panels are also disclosed.

## 28 Claims, 14 Drawing Figures











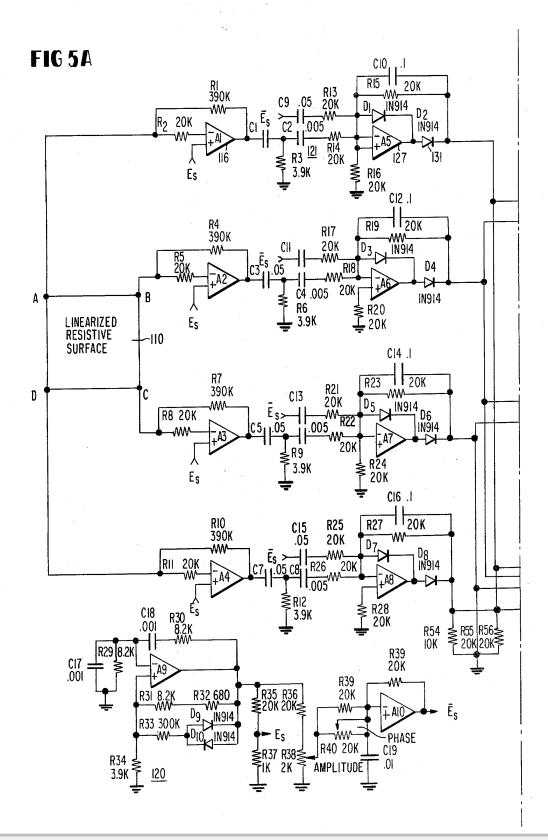
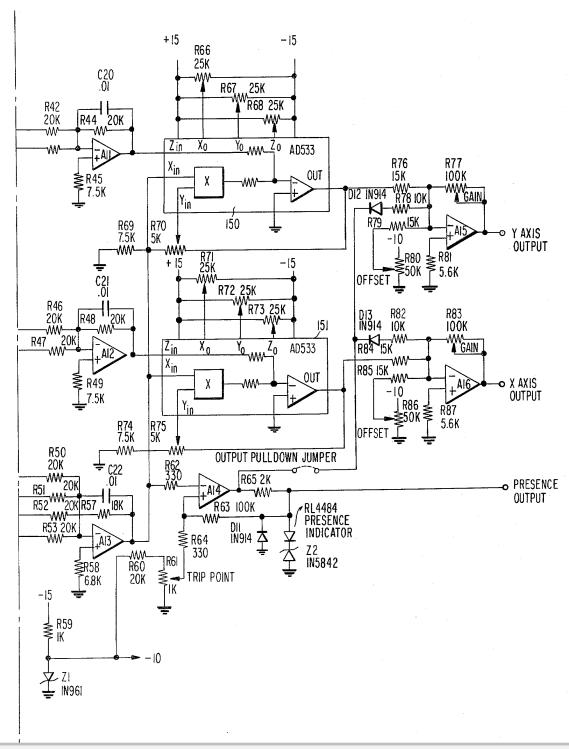


FIG 5B



# 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.

