

DEFENSIVE PUBLICATION

UNITED STATES PATENT OFFICE

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916. O.G. 1212

T916,007

TWO-MODE ECG MONITORING SYSTEM

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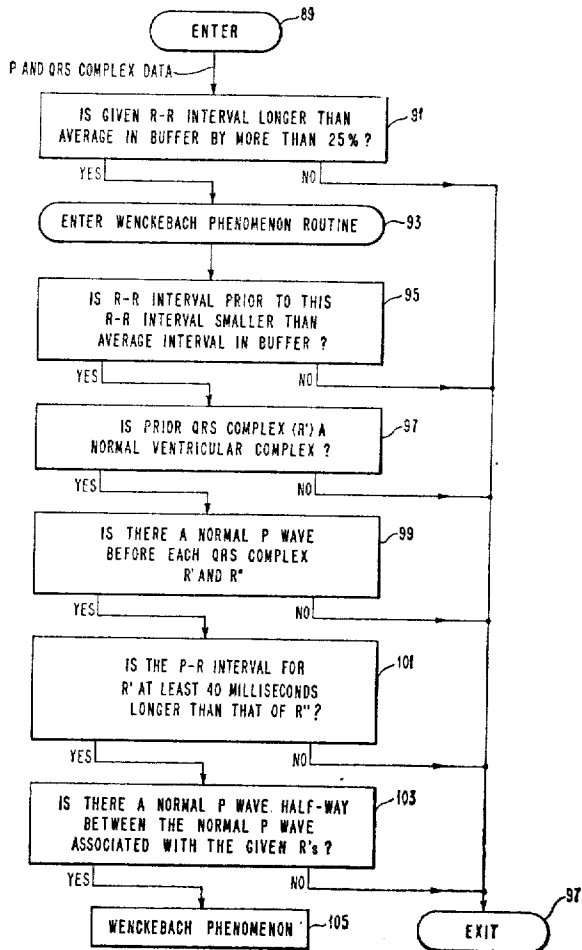
Continuation of abandoned application Ser. No. 135,681, Apr. 20, 1971. This application Apr. 3, 1973, Ser. No. 347,522

Int. Cl. G06f 15/42, 9/18

U.S. Cl. 340-172.5

5 Sheets Drawing. 32 Pages Specification

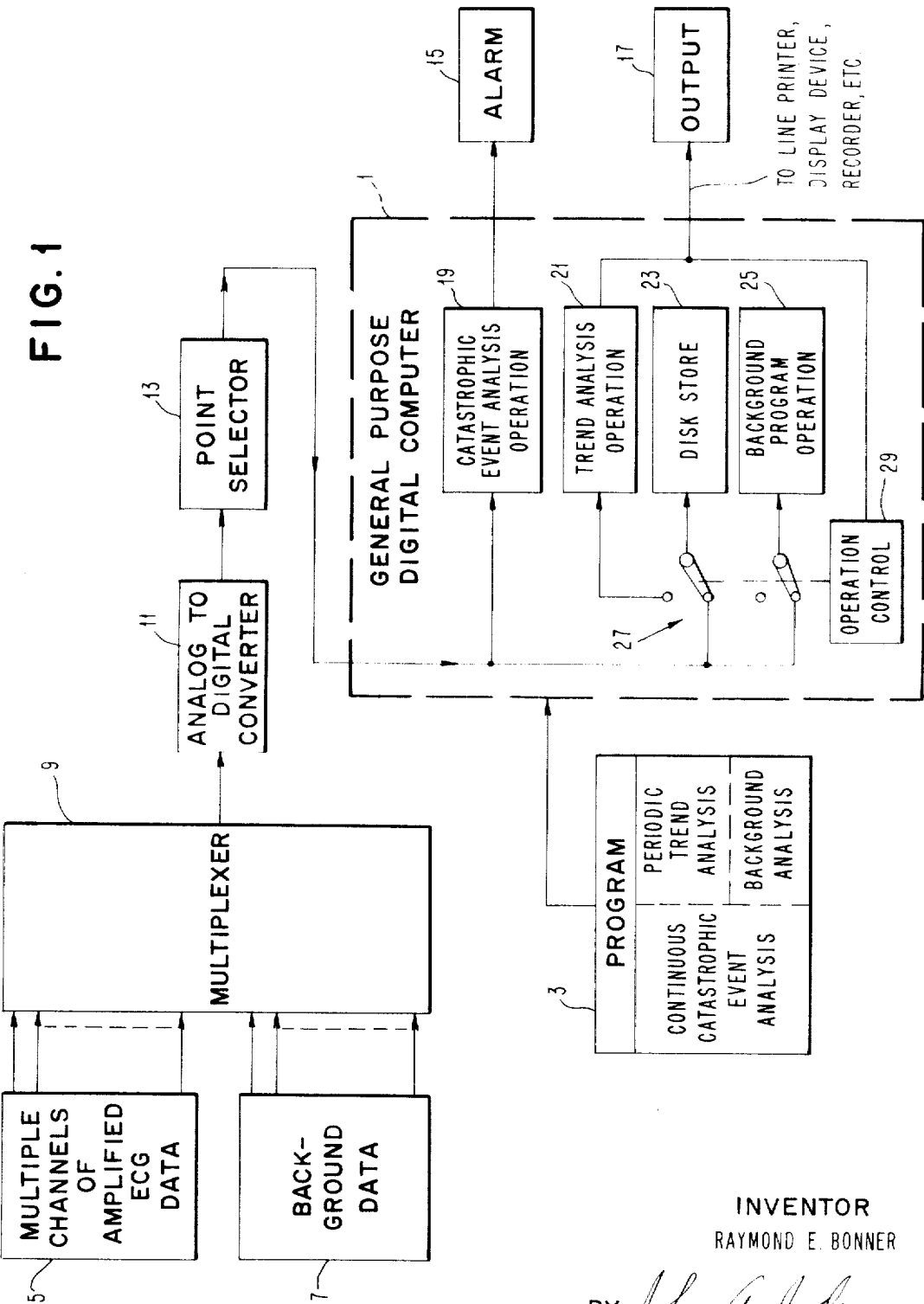
The monitoring and analysis of electrocardiographic signals, in the coronary care unit, to identify arrhythmias, and the like, requires the immediate determination of catastrophic event information and the subsequent determination of trend information. To achieve this end, a general purpose digital computer is shown generally within block 1 operated to continuously monitor, real time, selected ECG data and provide an alarm upon the occurrence of a catastrophic event. In addition, the computer is operated as represented by switch 27 and control block 29 to intermittently store, real time, fixed intervals of the selected ECG data. After each fixed interval of selected ECG data is stored in disk store 23, for example, the computer is operated to analyze for ECG events indicative of cardiac trends. During this trend analysis operation no selected ECG data is stored but the computer is still undergoing the catastrophic event analysis operation. After each trend analysis operation, another fixed interval of selected ECG data is stored. During each storage operation, background operations may be performed, in addition to the catastrophic event analysis operation.



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Original Filed April 20, 1971

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FIG. 2A

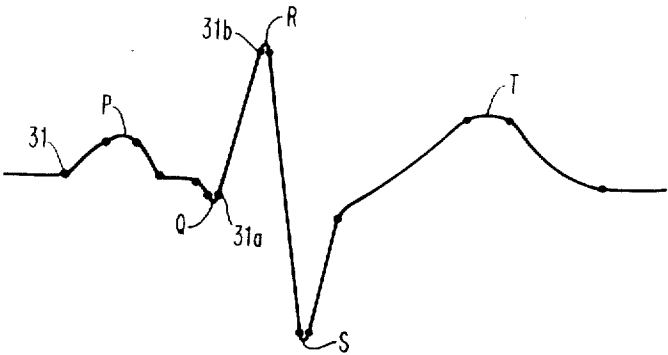


FIG. 2B

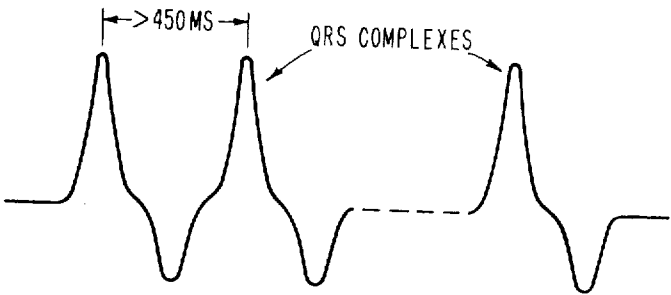


FIG. 2C

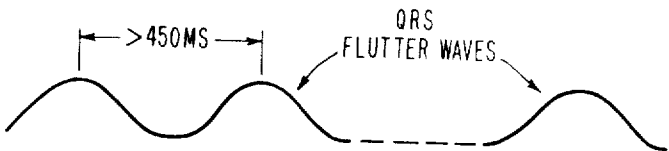
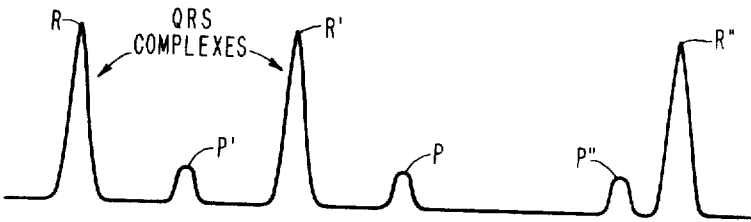


FIG. 2D



TWO-MODE ECG MONITORING SYSTEM

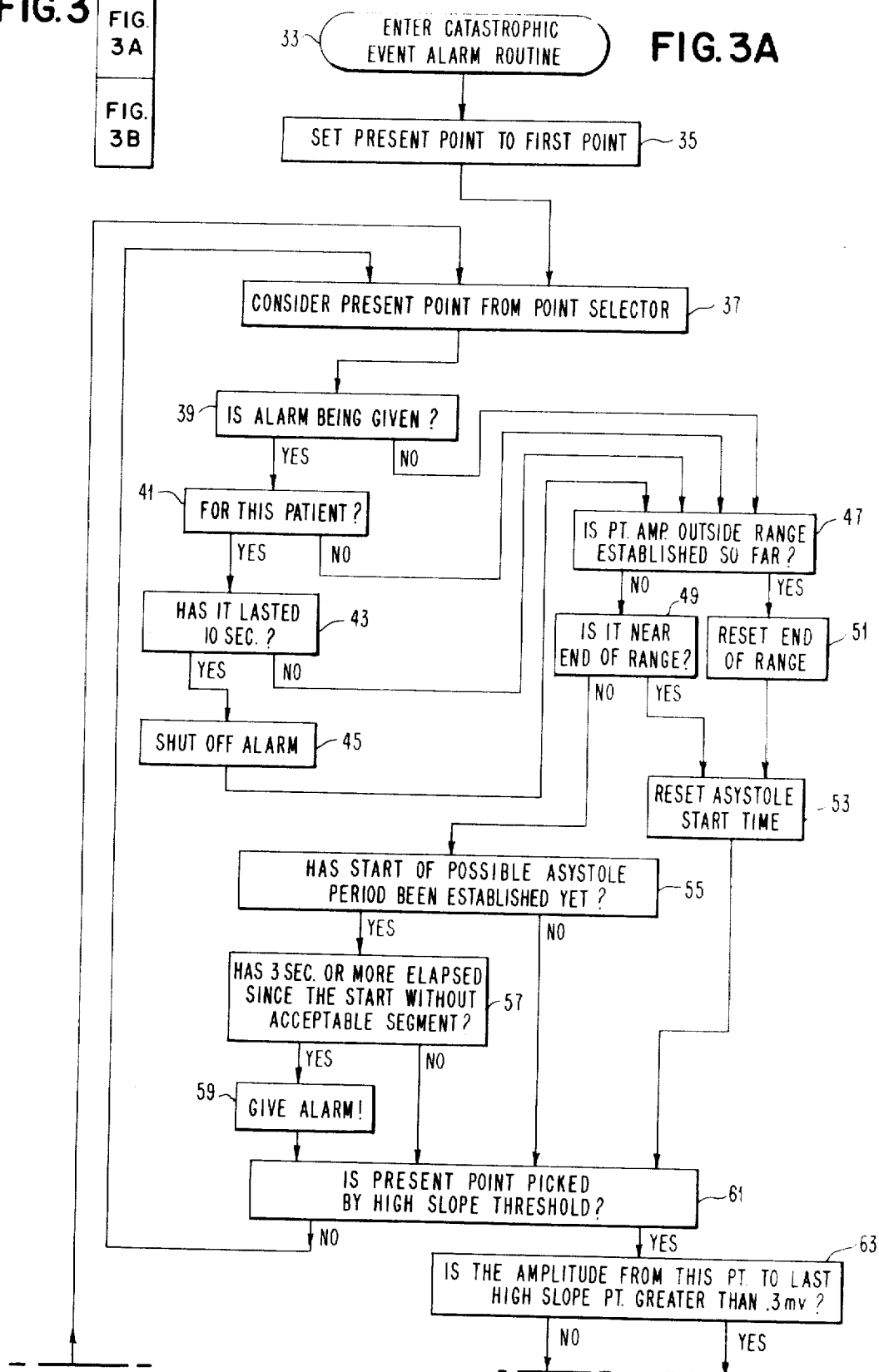
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FIG. 3

FIG.
3AFIG.
3B

FIG. 3A



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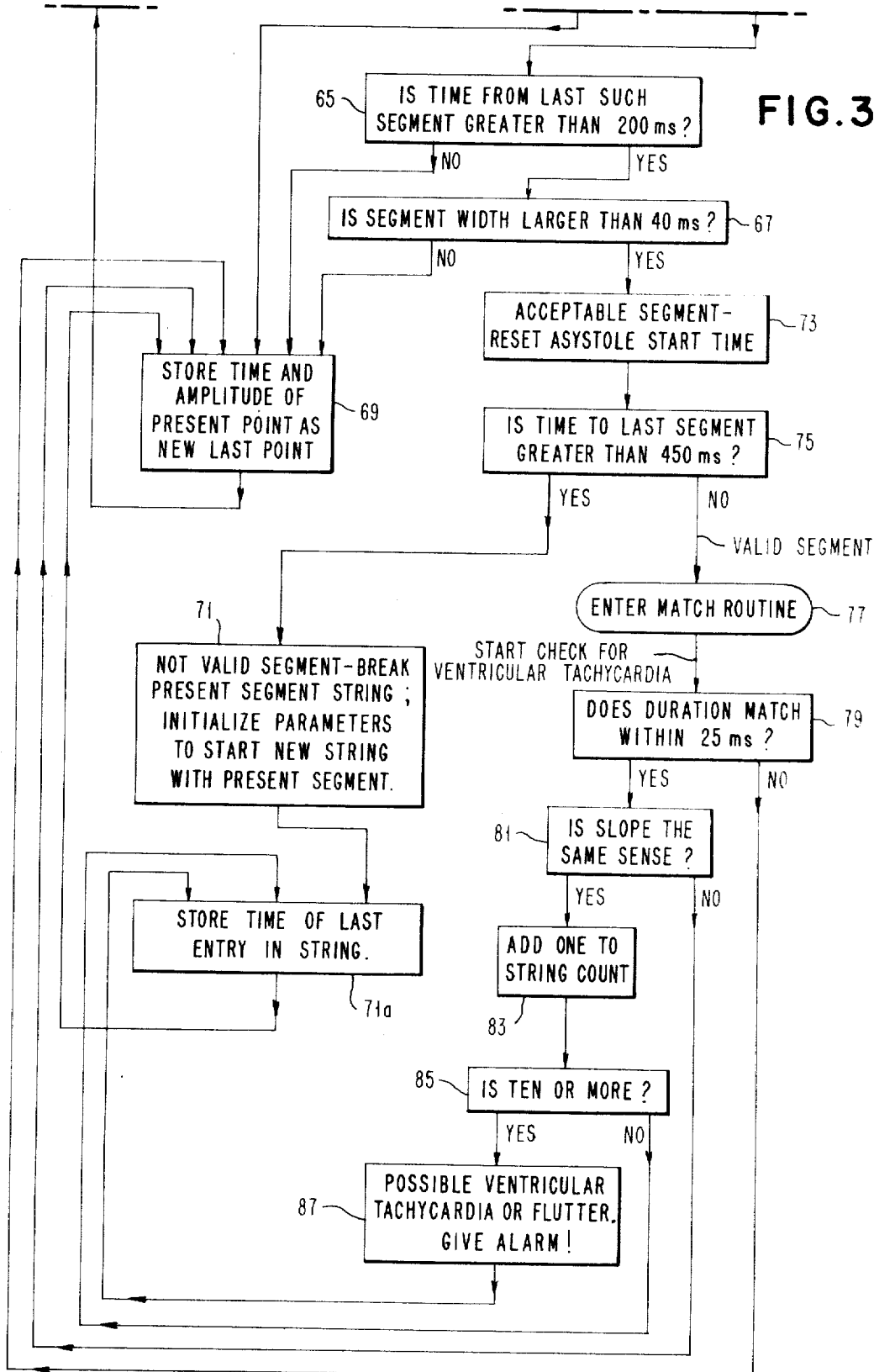
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FIG. 4

