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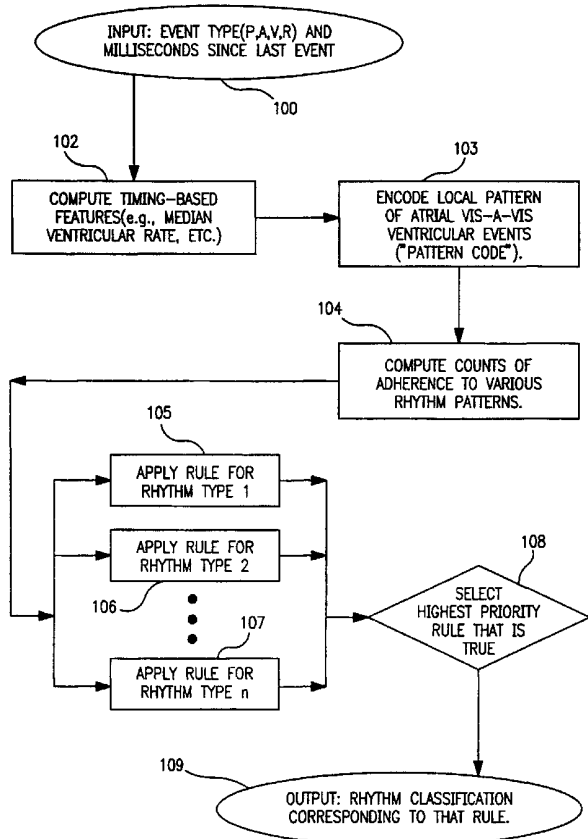
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD AND APPARATUS FOR DIAGNOSIS AND TREATMENT OF ARRHYTHMIAS



(57) Abstract: A third generation adaptive new ST Rule that provides a more accurate ST detection mechanism for next generation cardiac pacemakers, ICDs, drug pumps, monitors or other devices. The new ST Rule is a rule which, when met, may control delivery or withholding of therapy. The new ST Rule includes an adaptive onset criteria. An expected range of RR-intervals is calculated based on a trimmed means and a metric of RR variability to be derived over a preceding series of RR intervals. The expected range is updated adaptively after ventricular events. Preferably, the expected interval range is not adapted to curing on 1:1 rhythms. The activity of the adaptive onset criteria provided by the new ST Rule is further augmented by available atrial information. Specifically, patent codes indicative of gradual rate changes in normal sinus rhythm, if they persist, results in a new ST Rule being made. Patent codes inconsistent with sinus tachycardia, for example, those indicating a non 1:1 rhythm or rapid rate change associated with sudden onset of VT will result in the new ST Rule not being met. Thus, distinctions are met between various tachyarrhythmias to provide appropriate therapies and treat the identified tachyarrhythmias.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61N1/362

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 98 32489 A (PACESETTER INC) 30 July 1998 (1998-07-30) page 7, line 35 -page 9, line 14 page 60, line 8 -page 62, line 12 page 68, line 1 -page 69, line 20	26, 27
A	---	34-36, 41
A	US 5 193 535 A (BARDY GUST H ET AL) 16 March 1993 (1993-03-16) cited in the application the whole document	26, 34, 41
A	---	26, 34, 41
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Patent family members are listed in annex.

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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