the monitor will interrupt data collection and retrieve new initialization parameters just as if it had been inserted into the monitor and re-initialized. In the fixed floating mode the user provides a schedule of re-initialization parameters. The format for these parameters are the same as that used in the fixed initialization case.

In the floating floating initialization, initialization parameters are controlled by the nature of the data being collected instead of by apriori schedule. This is an adaptive situation. For example, a particular test might result in no analog saturation but saturation in zero crossing. This is a frequency problem and can be remedied one way by filter switching. In practice, the method is selected at the time of initialization by the user. A user-written program installed in RAM will initialize the monitor for the start time. One of the event channels is used to monitor the initialization parameter changes, and this information becomes a part of the data record. Floating floating and fixed floating initialization methods can be combined. Some parameters are not subject to adaptive change but are under control of a master schedule. Others are modified according to a user-specified algorithm that utilizes activity data to decide the best hardware and software configuration to choose contemporaneously with an on-going test.

While a particular embodiment of the invention has been shown and described, it will be obvious to those skilled in the art that changes and modifications may be made therein without departing from the invention in its broader aspects, and, therefore, the aim in the appended claims is to cover all such changes and modifications as fall within the true spirit and scope of the invention.

I claim:

1. A method of automatically monitoring predetermined body movements of a patient subject over time by isolating said predetermined body movements from general body movements, said method comprising:

providing an activity monitor capable of producing an analog electrical signal responsive to body movements of said patient subject, said activity monitor being capable of detecting said predetermined body movements by isolating said predetermined body movements from general body movements by adjusting characteristics of said analog electrical signal to enhance relevant signal information indicative of said predetermined body movements while removing irrelevant signal information indicative of general body movements;

defining within said activity monitor a mutually orthogonal, three-dimensional coordinate axis system having a sensitivity axis, a frequency axis and an epoch axis previously known to be specific for said predetermined body movements being monitored;

three-dimensionally tuning said activity monitor by selectively adjusting amplitude and frequency characteristics of said analog electrical signal in order to remove said irrelevant signal information and to enhance said relevant signal information in order to provide an enhanced signal indicative of said predetermined body movements rather than said general body movements;

affixing said activity monitor onto said patient subject's body,

recording said analog electrical signal over a monitoring period by processing said enhanced signal by passing said enhanced signal through a converter means for selectively sampling said tuned, enhanced signal with respect to an appropriate predetermined real time epoch selected according to the type of predetermined body movements being monitored to obtain resultant data signals, if any, which fall within regions defined in said, three-dimensional coordinate axis system which signals are indicative of said predetermined body movements and not of general body movements.

2. The method according to claim **1**, wherein said real time epoch is less than said monitoring period.

3. The method according to claim **1**, wherein said analog electrical signal is tuned by varying the amplitude characteristics of said analog electrical signal and maintaining the frequency characteristics of said analog electrical signal within a preselected range.

4. The method according to claim **1**, wherein said analog electrical signal is tuned by passing a preselected range of amplitudes through said activity monitor while varying the frequency bandpass.

5. The method according to claim **1**, wherein said real time epoch is selectively varied over different time periods, all of said different time periods being different from and falling within said monitoring period to obtain resultants for each preselected amplitude and frequency setting which are unique for a particular predetermined body movement.

6. A method of automatically monitoring predetermined body movements of a subject over time by isolating and amplifying said predetermined body movements while ignoring general body movements, said method comprising:

providing an activity monitor capable of producing an analog electrical signal responsive to and characterized by body movements of said subject;

defining within said activity monitor, a mutually orthogonal three-dimensioned coordinate axis system having a sensitivity axis, a frequency axis and a real time epoch axis, previously known to be specific for said predetermined body movements being monitored;

affixing the activity monitor to said subject to record body movement data over a preselected subject observation period;

tuning said activity monitor to enhance relevant signal information and to remove irrelevant signal information in order to provide an enhanced signal by selectively adjusting upper and lower threshold frequencies to define a desired frequency bandpass characteristic in said activity monitor so that said analog electrical signal is passed through said frequency bandpass to obtain frequencies indicative of said predetermined body movements and not of said general body movements, by adjusting amplitude characteristics of said analog electrical signal by passing a preselected range of amplitudes through said monitor to define a desired range of amplitudes characteristic of said predetermined body movements, and not of said general body movements and by passing said enhanced signal through a converter means for selectively sampling said enhanced signals with respect to an appropriate real time epoch which is different from and less than said subject observation period to provide resultant data signals, if any, which fall within known activity regions defined in said three-dimensioned coordinate axis system.

7. The method of claim **6**, further including selectively varying said real time epoch within said subject observation period to obtain resultant data signals for the amplitude and frequency setting of said activity monitor which are unique for a particular predetermined body movement.

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