

25. A programmable patient monitoring system as defined in claim 20 wherein each of said filter means includes an analog switch device responsive to said applied control signal for controlling said threshold frequency.

26. A programmable patient monitoring system as defined in claim 20 including saturation inhibit means responsive to said filtered analog electrical signal for inhibiting the storing of said signal in the event said signal exceeds a predetermined threshold level, said saturation inhibit means further including interactive software means responsive to said saturation inhibit means for altering configuration settings to prevent continued saturation.

27. A programmable patient monitoring system as defined in claim 20 further including detector means for developing a first resultant data signal indicative of a selected resultant mathematical parameter of said amplified, filtered analog signal and means for storing said first data signal in said finite memory.

28. A programmable patient monitoring system as defined in claim 27, wherein said detector means comprises a zero crossing detector having a threshold signal level, and said mathematical parameter is the time duration of said detector signal above said predetermined threshold.

29. A programmable patient monitoring system as defined in claim 27 wherein said detector means comprises a zero crossing detector having a threshold signal level, and said mathematical parameter is the frequency of said signal crossing said predetermined threshold.

30. A programmable patient monitoring system as defined in claim 27, wherein said detector means comprises a zero crossing detector having a threshold signal level, and said mathematical parameter including time-duration above threshold and frequency of threshold crossing are stored as resultant data signals in said memory.

31. A programmable patient monitoring system as defined in claim 30 including additional processing means for reconstructing the analog electrical signal from said stored resultant data signals.

32. A programmable patient monitoring system as defined in claim 20 further comprising computer means adapted to receive stored signal resultants from said memory means for further processing and adapted to transmit appropriate programming instructions to said processor circuit to alter or select a said operating mode and electrical interface means for electrically connecting said activity monitor to said computer.

33. A method for automatically monitoring predetermined body movements of a subject over time, said method comprising:

affixing a wrist-mounted activity monitor onto the non-dominant wrist of said subject thereby permitting the activity monitor to produce an analog electrical signal responsive to and characterized by said body movements, three-dimensionally tuning said activity monitor by selectively adjusting the upper and lower threshold frequencies to define a desired frequency band pass characteristic and adjusting the amplitude characteristics of said analog electrical signal to enhance relevant signal information and remove irrelevant signal information to provide an enhanced signal and thereafter, passing said enhanced signal through a converter means for selectively sampling said enhanced signal with respect to an appropriate real time epoch to provide resultant data signals, if any, which fall within known activity regions defined in a mutually orthogonal, three-dimensional coordinate axis system including a sensitivity axis, a frequency axis and an epoch axis, previously known to be specific for the predetermined body movement being monitored.

* * * * *

40

45

50

55

60

65