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(54) **WEARABLE HUMAN PHYSIOLOGICAL DATA SENSORS AND REPORTING SYSTEM THEREFOR**

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(57) **ABSTRACT**

A sensor array and computing apparatus are located on the human body while maintaining said sensors and apparatus within a proximity zone of the body such that the mobility and flexibility of the body are not deleteriously affected by the presence of the apparatus. A series of rigid and flexible pods within which the sensors and computing apparatus may be housed are typically comprised of a rigid material having a minimum hardness or rigidity mounted in conjunction with certain more flexible sections to allow relative movement of the rigid material sections with respect to each other. The flexible material is further utilized to conform said rigid sections to certain pre-specified portions of the human body. The system permits the dynamic monitoring of human physiological status data without substantial interference in human motion and flexibility. A processor is mounted within a pod location with or adjacent to a sensor pod location, or said processor may be electrically connected to said sensor through a flexible material. Data in a processed or unprocessed state is transmitted to an external monitor through certain wire-based or wireless technologies. There is optionally provided a graphical, visual, audible, tactile or haptic output means so that certain data might be displayed or otherwise communicated instantaneously to the wearer.

119 Claims, 26 Drawing Sheets

