ANNEX A TO THE STATEMENT OF GROUNDS (EP 882)

EP 882 CONDITIONAL AMENDMENT 1

CLAIMS

1. A system (40), comprising:

an at least partially implantable glucose sensor (42) that continuously monitors glucose concentration and generates signals associated with the glucose concentration;

a biocompatible layer (74, 75) located over the sensor (42) to prevent penetration of one or more biomolecules having one or more predetermined sizes, the biocompatible layer (74, 75) having a pore size smaller than the one or more predetermined sizes;

a processor (96, 97, 109) that processes the generated signals to determine the glucose concentration; and

a user interface (46, 48, 94) that outputs information associated with the continuously monitored glucose concentration;

characterized in that the system is configured to delay an initial calibration until after the predetermined sensor stabilization period in order that the signals generated by the at least partially implantable glucose sensor (42) have a level of accuracy that is increased over a duration of a sensor wear time period measured after the predetermined sensor stabilization period;

wherein the initial calibration uses a blood glucose reference measurement obtained after the predetermined sensor stabilization period.

2. The system of claim 1, wherein one or more reference measurements associated with a calculation of a mean absolute relative difference value are blood glucose measurements.

3. The system of any preceding claim, wherein the level of accuracy is a mean absolute relative difference value.

4. The system of claim 3, wherein the mean absolute relative difference value decreases during the sensor wear time period.

5. The system of any preceding claim wherein the number of generated signals associated with the glucose concentration increases during the sensor wear time period.

6. The system of any preceding claim, wherein the generated signals associated with the glucose concentration have a level of accuracy corresponding to a first mean absolute relative difference value during a first time period of the sensor wear time period, and a level of accuracy corresponding to a second mean absolute relative difference value at glucose concentrations during a second time period.

7. The system of claim 6, wherein the first time period precedes the second time period during the sensor wear time period.

8. The system of any one of claims 6 or 7, wherein the first mean absolute relative difference value is greater than the second mean absolute relative difference value.

9. The system of any one of claims 6 to 8, wherein one or more reference measurements associated with a calculation of the first mean absolute relative difference value and a calculation of the second mean absolute relative difference value are blood glucose measurements.

10. The system of any preceding claim, wherein the biocompatible layer (74, 75) is configured to prevent at least one of protein or blood clots from adhering to the glucose sensor (42).

11. The system of any preceding claim, wherein the biocompatible layer (74, 75) is configured to prevent one or more biomolecules from adhering to at least an electrode (58, 60, 62) or a sensing layer (64) of the glucose sensor (42).

12. The system of any preceding claim, wherein the at least partially implantable glucose sensor (42) continuously monitors the glucose concentration automatically.

13. The system of any preceding claim, further comprising a transmitter to transmit the signals generated by the at least partially implantable glucose sensor (42) to a receiving device (44).

14. The system of claim 13, wherein the transmitter is configured to receive inductively transmitted power.