AMENDMENTS TO THE SPECIFICATION

Please amend the originally filed specification as set forth below.

Please amend Paragraph [0020] as follows:

[0020] FIG. 1 illustrates a conventional approach to [[2D]]two-dimensional pulse oximetry in which the emitter is configured to emit optical radiation as a point optical source.

Please amend Paragraph [0021] as follows:

[0021] FIG. 2 illustrates the disclosed [[3D]]three-dimensional approach to pulse oximetry in which the emitted light irradiates a substantially larger volume of tissue as compared to the point source approach described with respect to ~~FIG. 2A~~FIG. 1.

Please amend Paragraph [0022] as follows:

[0022] FIG. 3 illustrates schematically a side view of a [[3D]]three-dimensional pulse oximetry sensor according to an embodiment of the present disclosure.

Please amend Paragraph [0023] as follows:

[0023] FIG. 4A is a top view of a portion of a [[3D]]three-dimensional pulse oximetry sensor according to an embodiment of the present disclosure.

Please amend Paragraph [0024] as follows:

[0024] FIG. 4B illustrates the top view of a portion of the [[3D]]three-dimensional pulse oximetry sensor shown in FIG. 4A, with the addition of a tissue measurement site in operational position.

Please amend Paragraph [0025] as follows:

[0025] FIG. 5 illustrates a top view of a [[3D]]three-dimensional pulse oximetry sensor according to an embodiment of the present disclosure.

Please amend Paragraph [0026] as follows:

[0026] FIG. 6 illustrates a conventional [[2D]]two-dimensional approach to reflective pulse oximetry in which the emitter is configured to emit optical radiation as a point optical source.

Please amend Paragraph [0027] as follows:

[0027] FIG. 7A is a simplified schematic side view illustration of a reflective [[3D]]three-dimensional pulse oximetry sensor according to an embodiment of the present disclosure.

Please amend Paragraph [0028] as follows:

[0028] FIG. 7B is a simplified schematic top view illustration of the [[3D]]three-dimensional reflective pulse oximetry sensor of FIG. 7A.

Please amend Paragraph [0048] as follows:

[0048] The light diffuser 704 receives the optical radiation emitted from the emitter [[302]]702 and homogenously spreads the optical radiation over a wide, donut-shaped area, such as the area outlined by the light diffuser 704 as depicted in FIG. 7B. Advantageously, the diffuser 704 can receive emitted light in the form of a 2D point optical source (or any other form) and spread the light to fit the desired surface area on a plane defined by the surface of the tissue measurement site 102. In an embodiment, the diffuser 704 is made of ground glass or glass beads. A skilled artisan will understand that may other materials can be used to make the light diffuser 704.

Please amend Paragraph [0049] as follows:

[0049] The light blocker 706 includes an annular ring having a cover portion 707 sized and shaped to form a light isolation chamber for the light concentrator 708 and the detector 710. (For purposes of illustration, the light block cover 707 is not illustrated in FIG. 7B.) The light blocker 706 and the cover 707 can be made of any material that optically isolates the light concentrator 708 and the detector 710. The light isolation chamber formed by the light blocker 706 and cover [[708]]707 ensures that the only light detected by the detector 710 is light that is reflected from the tissue measurement site.

Please amend Paragraph [0053] as follows:

[0053] Referring now to FIG. 7B, a top view of the 3D sensor 700 is illustrated with both the emitter 702 and the light blocker cover 707 removed for ease of illustration. The outer ring illustrates the footprint of the light diffuser 704. As light is emitted from the emitter 702 (not

shown in FIG. 7B), it is diffused homogenously and directed to the tissue measurement site 102. The light blocker 706 forms the circular wall of a light isolation chamber to keep incident light from being sensed by the detector 710. The light blocker cover 707 blocks incidental light from entering the light isolation chamber from above. The light concentrator ~~710~~708 collects the reflected light from the tissue measurement site 102 and funnels it upward toward the detector 710 at the center of the 3D sensor 700.