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(54) MULTIPLE WAVELENGTH SENSOR ATTACHMENT

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(57) **ABSTRACT**

A physiological sensor is adapted to removably attach an emitter assembly and a detector assembly to a fingertip. The emitter assembly is adapted to transmit optical radiation having multiple wavelengths into fingertip tissue. The detector assembly is adapted to receive the optical radiation after attenuation by the fingertip tissue. The sensor has a first shell and a second shell hinged to the first shell. A spring is disposed between the shells and urges the shells together. An emitter pad is fixedly attached to the first shell and configured to retain the emitter assembly. A detector pad is fixedly attached to the second shell and configured to retain the detector assembly. A detector aperture is defined within the detector pad and adapted to pass optical radiation to the detector assembly. A contour is defined along the detector pad and generally shaped to conform to a fingertip positioned over the detector aperture.