

Title (en)
PHYSIOLOGICAL STRESS DETECTOR DEVICE AND METHOD

Title (de)
VORRICHTUNG ZUR DETEKTION VON PHYSIOLOGISCHEM STRESS UND ZUGEHÖRIGES VERFAHREN

Title (fr)
DISPOSITIF DE DETECTION DE STRESS PHYSIOLOGIQUE ET PROCEDE CORRESPONDANT

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Application
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Abstract (en)
[origin: WO9963883A1] This invention is a method and device for measurement of a level of at least one blood constituent. The device includes a light source, and a light detector proximate the surface of an organ. The device also includes a pair of adjustable gain amplifiers (A1, A2), and a processor/controller (44) connected within a processing unit. The processing unit operates to separate an AC signal component from a DC signal component. The light source includes at least one light emitting unit. Preferably the light source alternately emits light at two different wavelength ranges, and normalizes the AC and DC output signals corresponding with the intensity of the light reflected from the organ and calculates a ratio of the normalized signals for each wavelength range. The device may determine the level of the blood constituent, and may also use this level for monitoring and/or to activate an alarm (48) when the level falls outside a predetermined range. The device, and the method may be applied to monitoring, inter alia, conditions of apnea, respiratory stress, reduced blood flow in organ regions, heart rate, jaundice, and blood flow velocity.

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