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Patent Search

Invention Title	NEXT-GENERATION WEARABLE BIOSENSOR FOR CONTINUOUS HEALTH MONITORING					
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Abstract:

The invention relates to a system and method for continuous health monitoring by integrating multiple sensors, including ECG, PPG, temperature, and accelerometer, into a compact and ergonomic design. Advanced signal processing algorithms enable real-time data analysis, facilitating early detection of health anomalies. Efficient power management, seamless wireless connectivity, and optional machine learning integration further enhance its capabilities, empowering users to proactively manage their health with personalized insights and adaptable configurations. This biosensor represents a significant advancement in wearable health monitoring technology, promising comprehensive and user-centric solutions for enhanced well-being.

Complete Specification

Description:The present invention relates to the field of biomedical engineering, specifically to wearable biosensor technologies. More particularly, it pertains to a nextgeneration wearable biosensor designed for continuous health monitoring, capable of measuring multiple physiological parameters, processing and analyzing data in realtime, and transmitting the data wirelessly for further analysis and user interaction. The invention aims to improve the accuracy, comfort, and functionality of wearable health monitoring devices, providing users with comprehensive and actionable health insights. BACKGROUND OF THE INVENTION

The following description of related art is intended to provide background information pertaining to the field of the disclosure. This section may include certain aspects of the art that may be related to various features of the present disclosure. However, it should be appreciated that this section be used only to enhance the understanding of the reader with respect to the present disclosure, and not as admissions of prior art.

Wearable biosensors have emerged as promising tools for continuous health monitoring, enabling individuals to track their physiological parameters conveniently and non-invasively. Traditional health monitoring methods often involve periodic visits to healthcare facilities or the use of bulky and cumbersome monitoring devices, which can be inconvenient and impractical for everyday use. Wearable biosensors address these limitations by offering real-time monitoring capabilities in a compact and userfriendly form factor.

Existing wearable biosensors typically focus on measuring a limited set of physiological parameters, such as heart rate or activity level using single or dual sensor

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