Wearable Passive biosensing interface method for gathering bioinformation

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Abstract— **Recently, a variety of biometric information systems have been tried and developed to provide IoT-based healthcare and medical information services. Existing biometric information systems actively collect and analyze biometric information around user terminals or smart devices. On the contrary, this study proposes a passive biosensing system and a passive sensing method for collecting and analyzing biometric information using wearable passive patches. In particular, a passive sensing system and method using a passive patch that can be detected by activation of an external power source without an internal battery is proposed. This paper focuses on the following elements of passive biometric information system. The first describes the structure and components of a passive patch system that can be operated from an external source without an internal battery. The second describes passive biometric information algorithms that passively detect biometric information in real time. Finally, we propose a passive sensing analysis modeling that analyzes and evaluates the signal sensitivity of biometric information, and describes an analysis example of bioinformation sensitivity.**

Keyword— **Passive sensing, Patch interface, IoT, Wearable system, Bioinformation**

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