Biometric Identification Using Intra Body Communications

Tech ID: 34082 / UC Case 2018-502-0

BRIEF DESCRIPTION

An innovative system for biometric identification that utilizes intra-body communication for secure authentication.

FULL DESCRIPTION

This technology encompasses a biometric identification system comprising a biometric transmitter device and a biometric receiver device, utilizing at least one transmit and receive electrode for contact with an individual's skin at separate locations. The system transmits a signal through the individual's body, which is then received for biometric authentication, leveraging the unique channel response of the individual's body as a biometric marker.

SUGGESTED USES

- Wearable devices for personal identification and access control.
- Financial transactions at POS terminals and ATMs with enhanced security.
- Secure access to restricted areas or systems within corporate and government facilities.
- Healthcare for patient identification and access to medical records.

ADVANTAGES

- Enhanced security through unique biometric authentication that is difficult to replicate or forge.
- Eliminates the need for traditional and less secure authentication methods like passwords.
- Flexible implementation in various forms, including wearable devices and point of sale terminals.
- Continuous authentication capability by comparing channel responses periodically.

PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Published Application	20220197987	06/23/2022	2018-502

CONTACT

Ben Chu
ben.chu@uci.edu
tel: .



OTHER INFORMATION

CATEGORIZED AS

- **Biotechnology**
  - Bioinformatics
  - Other
- **Security and Defense**
  - Other
- **Sensors & Instrumentation**
  - Biosensors

RELATED CASES

2018-502-0

UCI Beall
Applied Innovation

5270 California Avenue / Irvine,CA
92697-7700 / Tel: 949.824.2683

© 2025, The Regents of the University of California
Terms of use
Privacy Notice