



DEVICE AUTHENTICATION THROUGH EARPHONES

Applicant

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Licenza

IT102020000001192

Priority Data

22/01/2020

TRL scale



What's needed for?

This patent covers a method than can authenticate a person using earphones, thanks to the movement of the mouth. The earphones record the shape of the ear canal during a predefined movement of the mandible and a machine learning algorithm handles the recordings to identify the person. Once the algorithm has identified the person, they can connect to device whenever their earphones are inserted, without touching the device.

Authentication methods are fundamental because they guarantee security and privacy of people's activities through electronic devices. Biometrics are regularly used for authentication because they combine excellent levels of security and usability. This invention allows people to authenticate to their device through their earphones.

Advantages

- The authentication is User-friendly
- Based on biometrics for maximum security
- Uses a common existing accessory (earphones)
- Does not require interaction with a screen or use of hands to authenticate.
- Can be developed on any operative system?

Applications

- Device authentication in all scenarios when hands are busy: at an airport gate, in the crowded subway, while driving.
- Future applications may include understanding if users are eating (and what they are eating), talking, yawning, coughing, or breathing; and where they are looking.