

3.25 A method of detecting a falsified presentation to a vascular recognition system

Keywords

vascular biometrics, anti-spoofing

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Functional description

Biometric vascular recognition is the recognition of an individual through the vascular (veins and arteries) pattern of their hand/finger. If the biometric is stolen it has been shown that it is possible to create a fake. Presenting a fake biometric on the sensor of a biometric recognition system is denoted as spoofing or presentation attack. Anti-spoofing or presentation attack detection, also termed as liveness detection, is the process of detecting a fake biometric.

This invention disclosure describes processes to detect a presentation attack with a fake vascular biometric.

Innovative aspects

The invention is based on a multi-algorithm and multi-spectrum framework processing both Visual spectra and Near-InfraRed spectra static and dynamic images.

Commercial application examples

- Biometrics-enabled identity management systems (Automated Border Control, Access Control, ...)
- Multi-factor authentication security systems (Critical Infrastructures, e-Banking, ...)

More information

on request (patent pending)