

Title (en)

A SENSOR ARRAY FOR READING A MAGNETIC PUF

Title (de)

SENSORANORDNUNG ZUM LESEN EINES MAGNETISCHEN PUF

Title (fr)

RÉSEAU DE CAPTEURS POUR LA LECTURE D'UNE PUF MAGNÉTIQUE

Publication

EP 4025926 A2 20220713 (EN)

Application

EP 20866899 A 20200904

Priority

- US 201962896883 P 20190906
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Abstract (en)

[origin: CN114341660A] A magnetic sensor array device is described that is composed of a plurality of single sensor dies that are individually cut out from a wafer and encapsulated in a multi-chip module (MCM). The device includes a multi-axis magnetic sensor array that, when placed on a circuit card, can measure a multi-dimensional magnetic field of a two-dimensional region of any size with high spatial resolution, reduced sensing distance, higher measurement throughput, tolerance to motion, improved temperature measurement, and increased yield, the circuit card includes part of an authentication system that includes a physical unclonable function ("PUT"), a substrate, a plurality of magnetized particles randomly dispersed in the substrate, and a PUT reader constructed using one or more magnetic sensor array devices, where the PUT reader measures a magnetic field at a plurality of locations proximate to the magnetized particles. The measured magnetic field data may be compared to previously registered data to assess reliability.

IPC 8 full level

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