

Request Information

Permalink

Electric Circuits Of Enhanced Sensitivity Based On Exceptional Points Of Degeneracy

Tech ID: 34114 / UC Case 2021-700-0

BRIEF DESCRIPTION

A novel circuit design promoting enhanced sensitivity for electromagnetic sensing through exceptional points of degeneracy.

FULL DESCRIPTION

Researchers at the University of California, Irvine, have developed an innovative circuit design that leverages exceptional points of degeneracy (EPDs) to achieve ultrahigh sensitivity in electromagnetic (EM) sensing applications. This design simplifies the fabrication process, potentially reducing the manufacturing costs of sensors for medical, industrial, and automotive applications.

SUGGESTED USES

- » Ultrahigh sensitive sensors for medical diagnostics and monitoring.
- » Advanced sensing systems in industrial quality control and automotive safety.
- » Implantable biosensors for continuous health monitoring.
- » Environmental monitoring through precise EM sensing.

ADVANTAGES

- » Unprecedented sensitivity compared to traditional sensors.
- » Simplified design and fabrication process.
- » Reduced manufacturing and production costs.
- » Versatile applications across various industries.

PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Published Application	20230361742	11/09/2023	2021-700

CONTACT

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



OTHER INFORMATION

CATEGORIZED AS

- » **Sensors & Instrumentation**
 - » Biosensors
 - » Environmental Sensors
 - » Medical
 - » Other
 - » Position sensors

RELATED CASES

2021-700-0

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](#)