

DADC - Innovative setup for the study of radiation on diodes

■ KEYWORDS

Energy collector
Ionizing radiation
3D printing
Stray light
Diode

■ PATENT

Title: Analyzing apparatus

Priority date: 14/12/2020

■ LICENSING

Exclusive, non-exclusive
licences and research
collaborations

■ INVENTORS

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■ REFERENCE

P1277-GB DADC

■ PROBLEM

When studying the effects of radiation (visible light, ionizing radiation...) on diodes, one must control three parameters: darkness, alignment and distance. In addition, proper electrical connections between the diodes and any instrument involved in the experiment are required for accurate measurements.

Currently, there is no cheap, user-friendly, and adaptable solution for radiation effects study under the above constraints

■ SOLUTION

The invention proposed is a cheap, user-friendly, and adaptable setup in order to allow radiation effects testing. The setup offers a variety of comparative advantages such as :

- The setup embeds the diode and hides it from any external light, **ensuring total darkness** required by the nature of the test
- **0° angle** between the diode and the radiation source
- **Total control on the distance** as a variable parameter
- Electrical connections **guaranteed by design** and can be **easily tested**
- Setup **"as is"** for several types of discrete components, making it **user-friendly and adaptable** for several test cases
- **Adaptability and low production cost** thanks to the 3D printing technique

■ INNOVATION

- 3D printing technique
- Optimal setup for radiation effects tests
- Adaptability to the experiment requirements

■ TECHNOLOGY STATUS

TRL ???

■ MARKETS

- Photosensitive diodes
- Test services
- Radiation hardening electronics
- Measuring devices

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