Docket #: S13-430

Power management and power conversion for implantable stimulators or sensors

Researcher in Prof. Ada Poon's laboratory have developed a way to increase the efficiency of rectification and power management of wirelessly powered implants that are operated in the electromagnetically weakly coupled regime. The device employs a coil with a characteristic dimension in the mm-range with a rectifier, and is typically housed in a RF transparent case. The device operates in the high MHz to low GHz range, and uses a rectifier to convert the AC signal to a DC signal.

Applications

- Wireless implantable devices

Advantages

- Increases the efficiency of AC-DC conversion for miniaturized implants powered by high frequency electromagnetic waves

Patents

- Published Application: 20150249344
- Published Application: 20180296849
- Issued: 10,004,913 (USA)
- Issued: 10,828,502 (USA)

Innovators

- Alex Yeh
- Ada Poon

Licensing Contact

Evan Elder

Associate Director, Licensing and Strategic Alliances, Physica

Email