

# Self-Powered, Auto-Responsive Implanted Vagal Nerve Stimulator For Weight Control

View U.S. Patent No. 11,027,140 in PDF format.

WARF: P180263US01

Inventors: Xudong Wang, Weibo Cai, Guang Yao, Lei Kang

## The Invention

The invention provides an implantable vagal nerve stimulator having a "passive" generating power source that harvests the stomach's movements to transform kinetic energy to electrical charge without the need for a battery. In this regard, the invention is self-powering and is automatically timed to stomach peristalsis. While sporadic stimulation to the vagal nerve would seem too infrequent to cause weight loss effects, electrical stimulation delivered at the optimal time (e.g., during food consumption) has been found to optimize the effects of vagal nerve stimulation, giving the user's brain a "full stomach" signal before the user over-consumes food.

## Additional Information

#### For More Information About the Inventors

- Xudong Wang
- Weibo Cai

## **Publications**

• Read a news story about this technology.

## **Tech Fields**

• Medical Devices: Neurological devices

For current licensing status, please contact Michael Carey at <a href="mailto:mcarey@warf.org">mcarey@warf.org</a> or 608-960-9867