

# TECHNOLOGY Fly-Ear Inspired Miniature Acoustic Sensor System

# **OVERVIEW**

Conventional directional microphones have various constraints when attempting to deliver high performance along with a small footprint. There is performance degradation when size decreases relative to the target sound wavelength. Thus, there is a need for a miniature microphone that is able to provide excellent sound source localization.

Researchers at the University of Maryland have developed a miniature acoustic sensor system that fully incorporates a fly ear inspired sensor mechanism which provides maximum directional sensitivity and minimum nonlinearity, and in an extremely small size.

### **APPLICATIONS**

Microphone Sensor Array Sensing Systems Health Care – Hearing Aids Search and Rescue Robots Underwater Acoustic Networks

# CONTACT INFO

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# **Additional Information**

### INSTITUTION

University of Maryland, College Park

# CATEGORIES

- Sensors/Monitors
- Microelectronics
- Engineering
- Devices

# **EXTERNAL RESOURCES**

• US Patent 8,503,693

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