Docket #: S07-325

Optical and opto-mechanical devices based on photonic crystals and sub-wavelength grating structures at the tip of an optical fiber

An acoustic sensor and a method of fabricating an acoustic sensor are provided. The acoustic sensor includes at least one photonic crystal structure and an optical fiber having an end optically coupled to the at least one photonic crystal structure. The acoustic sensor further includes a structural portion mechanically coupled to the at least one photonic crystal structure and to the optical fiber. The at least one photonic crystal structure, the optical fiber, and the structural portion substantially bound a region having a volume such that a frequency response of the acoustic sensor is generally flat in a range of acoustic frequencies.

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Patents

- Published Application: 20080226217
- Published Application: WO2008086448
- Published Application: 20100092125
- Published Application: 20130022307
- Issued: 7,630,589 (USA)
- Issued: 8,249,400 (USA)
- Issued: 8,548,283 (USA)

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