Docket #: S10-227

Magnetically Actuated Photonic Crystal Sensor

This patented technology is a magnetically actuated photonic crystal sensor system. It utilizes a photonic crystal (PC) coupled to magnetic material which is then mounted on an optical fiber. When the PC is displaced by a magnetic field, the displacement can be used to calculate the electromagnetic interference on the sensor. This calculation can be used to increase the reliability of optical proximity sensors, particularly in environments with obstructions, debris and the potential for physical deformation.

Applications

- **Sensors** - magnetic field and proximity sensing

Advantages

- **Fiber interface**
- **Immunity** to electromagnetic interference
- **Small, robust, and inexpensive construction**

Patents

- Published Application: 20120045165
- Issued: 8,494,312 (USA)

Innovators

- Michael Carralero
- Olav Solgaard
- Ty Larsen

Licensing Contact

David Mallin

Licensing Manager, Physical Sciences

Email