**Name of Technology:** Ferrofluid based temperature sensor, sensitivity 3.7 (± 0.2) mK

**Summary:** Ferrofluid based Temperature Sensor is a device capable of sensing minute changes in temperature and is based on Charles Law. The gas enclosed in the bulb expands with the increase in temperature, creating a pressure which lifts the lower ferrofluid bearing. This bearing provides very low friction, actuation and act as perfect sealer and is connected to another bearing at the top with iron rod and a primary, secondary coil arrangement. When the upper bearing moves in coil arrangement, change in EMF is sensed, which is directly proportional to change in temperature.

**Application:** Used in Temperature standard Laboratories, Biomedical Application, Defense Sector

**Advantages:**
1. High sensitivity
2. Low cost
3. Eco-friendly
Choose the Readiness level of the Technology

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Related Patents:
Patents No: 47 DEL 2009; Country: India; Publication Date: 19/04/2013; Grant Date: Awaited, Year of Introduction: Not available
Broad Area/category: Sensors
User Industries: Precision measurement instruments manufacturing, health sector.