

LICENSING OPPORTUNITY: SMART TEMPERATURE SENSOR THAT WORKS WITHOUT TOUCH

DESCRIPTION

Problem

Traditional temperature detectors often suffer from inconsistent readings due to environmental changes. Many require physical contact, limiting their use in sensitive applications. This invention eliminates the need for direct contact, making it ideal for non-invasive temperature monitoring. It also improves measurement stability, reducing errors caused by external temperature fluctuations. As a result, industries can achieve more reliable and accurate thermal readings.

Invention

This invention introduces a temperature detector that stabilizes radiation measurements using an isothermal reference. It ensures high accuracy by self-referencing ambient radiation, reducing errors caused by environmental fluctuations. The detector is designed to work without direct contact, making it ideal for remote sensing applications. By using a stabilized radiation source, it enhances precision in temperature readings. The technology is particularly useful in industrial, medical, and scientific fields.

BENEFITS

Potential Commercial Applications

This technology can be applied in medical thermometers, allowing for non-contact patient temperature monitoring. It is useful in industrial settings, where precise temperature control is critical for manufacturing processes. The invention can enhance climate monitoring systems, improving environmental data collection. It also has applications in scientific research, where accurate temperature readings are essential. Additionally, it can be integrated into smart home devices for automated temperature regulation.

Competitive Advantage

- Higher accuracy compared to traditional temperature sensors.
- Non-contact measurement, making it ideal for sensitive applications.
- Improved stability, reducing errors caused by environmental changes.
- Versatile applications across multiple industries.
- Enhanced reliability, ensuring consistent performance over time.

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