Wireless Sensors in Injection Molds

This invention consists of a wireless sensor system used to measure temperature and/or pressure within an electromagnetically shielded environment. In electromagnetically shielded environments, the processor transmits the data when the electromagnetically shielding components are moved into a non-shielding configuration.

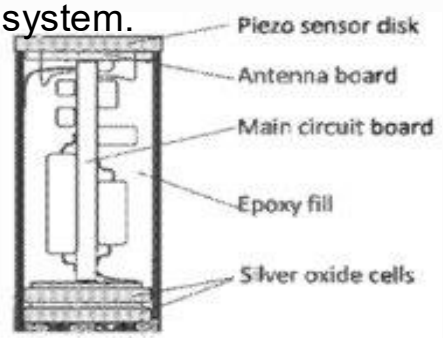
Problem

Current sensors have issues with complexity of maintenance due to sensor wire breakage, lack of processing data, and long installation and machining time.

Solution

This invention provides a novel wireless pressure sensor that works in injection mold. It is inexpensive and allows for the manufacture of more complicated injection molded parts or to tune the parameters of the existing molding process.

Cross-sectional view of an embodiment of a sensor system.



Value Proposition

This invention is a robust sensor with an easy installation procedure, used in injection molds for measuring pressure and/or temperature which enables injection molding as part of industry 4.0. Additionally, this sensor can enable IOT and provides total mold management data that can convert traditional mold to smart mold.

Competitive Advantages

- Inexpensive
- Robust
- Easy installation
- Allows to convert traditional mold into a Smart mold
- No special modification is necessary for the use of this sensor

Status of Development

- Seeking implementation and research advancement partners

IP Status

- Patent # US9969113
- Licensing available

For further information regarding this Technology please contact:
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