

## **Direct Write Sensors**

### **Disclosure Number**

201503453

### **Technology Summary**

The invention relates to sensors and more specifically to low cost sensors and methods of manufacturing low cost sensors. This disclosure transforms the use of sensor technologies for the purpose of achieving energy efficiency improvement, environmental monitoring and assessment, and new discovery enabled by ubiquitous sensor networks. Direct-write sensors are enabled by the nexus of recent technology developments including: 1) ultra-miniature passive acoustic sensor wave platforms; 2) direct printing of spatially precise patterns and multi-layered structures; 3) tailored nano-structured films; and 4) the methods and scalable manufacturing techniques to integrate these functional elements. The detailed description of the invention to follow will describe each important component separately and taken together, creating a new paradigm in sensor technology – disposable sensors.

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