

# GENTAG

## Gentag Technology

### NFC Cell Phone Sensor Networks

GENTAG, Inc. is pioneering the use of disposable wireless diagnostic sensors combined with NFC cell phones or tablets to make healthcare affordable and accessible to everyone worldwide.

The patented GENTAG technology provides the basis for the creation of the next generation of wireless technology, combining low cost NFC consumer cell phones, wireless networks, geolocation and disposable wireless sensors for various market applications. Disposable wireless sensors called RFID sensors can be read by NFC cell phones or tablets using a proprietary process and are anticipated to replace more expensive wireless sensor technologies, such as Bluetooth®, in a variety of market applications.



Low cost disposable RFID sensors are now possible with GENTAG's proprietary chip technology. Since NFC [cell phones](#) are currently either already available or under development with major cell phone manufacturers worldwide and market forecasts predict that up to 1 out of 2 phones in the future will be RFID-enabled, the global emergence of RFID sensor networks can be anticipated.

By combining NFC cell phones or tablets, RFID sensors and GENTAG's proprietary software with cellular networks or the Internet, the consumer will be empowered to read any RFID sensor tag anywhere for almost any application.

A particular focus area for GENTAG using NFC cell phones is consumer diagnostics. RFID sensors can be integrated into low cost, non-invasive, disposable diagnostic devices such as

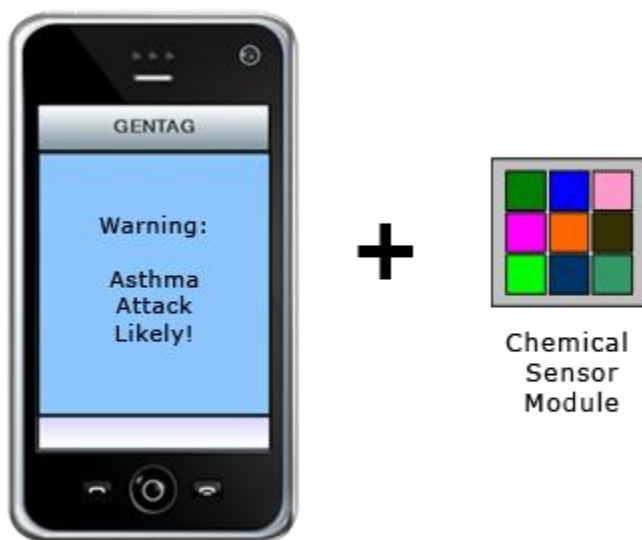
"smart" disposable wireless skin patches or personal drug delivery systems and read directly with a cell phone under existing GENTAG/Altivera patents.



### Cell Phones-Sensors

In addition to the above technologies GENTAG, Inc. owns several patents covering the combination of cell phones with removable or built-in sensor modules for consumer, medical, industrial and Homeland Security applications.

A patented application example is an asthma prevention cell phone for consumers suffering from multiple chemical sensitivities (MCS) or chemically-induced asthma. As described in the GENTAG/Altivera patents, sensors for cell phones can be tailored for the specific medical needs or sensitivities of given individuals.



GENTAG also owns several patents covering the uses of cell phones combined with sensors for threat detection (e.g. radiation, chemicals or biological agents) for personal or Homeland Security applications.



The company's patented technology covers both sensors on the cell phone ([7,109,859](#)), RFID sensors read by cell phones ([7,492,254](#)) or the combination technology.

### **Wide Area Non-GPS Wireless Geolocation**

As part of its early IP, a GENTAG team member developed and tested at Sandia National Laboratories a sophisticated and highly accurate geolocation technology called Radar Responsive tag (RR tag) for the US Department of Defense. The technology is suitable for a wide range of wireless geolocation applications from large areas on the scale of tens of miles to smaller geographical areas. This technology led to the E911 (emergency geolocation) system in the US. One of the unique features of the Radar Responsive tags is their ability to locate items or people within buildings over large areas. The locating technology places the processing power at remote base stations and not the tag device being located. Applications of RR tags with sensors include "smart" diagnostic skin patches for remote vital status monitoring and geolocation of special needs patients (e.g. Alzheimer's), firefighters, or athletes. For more information see GENTAG patent [6,031,454](#).

GENTAG, Inc. offers a wide range of geolocating technology capabilities that can be integrated with almost any wireless communication protocol or sensor network application.