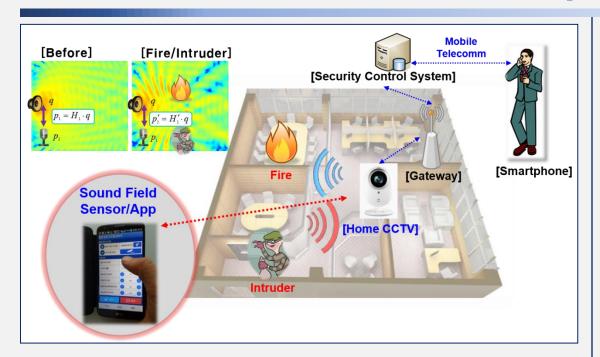
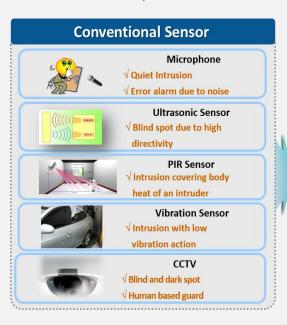


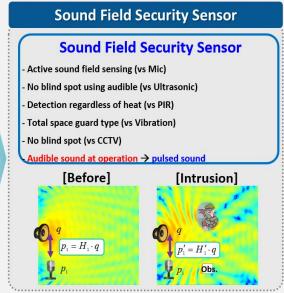
# Smart Home Security Module Based on Sound Field Security Sensor



#### **Technology Summary**

- New sensor technology that detects and classifies security events such as fire and intrusion even in blind spots based on sound transfer function variation using a speaker and microphone set in secured spaces such as home and car
  - The smart home security system is composed of smart CCTV, gateway and security control system, and the smart CCTV is composed of an IP camera with a sound field security sensor.
  - The smart home security system is able to detect the early stage of fire or an intruder even in blind spot using a new sound field security sensor and to send alarm message to a smartphone in order to get "golden time" for the fast reaction in fire emergency situation, and to overcome the weak points of conventional intrusion detection sensors such as difficulty in dark or blind spot and error alarm.





#### **Features**

- Highly reliable intrusion detection performance: Solution to the problem of the conventional intrusion detection sensors such as dark, blind area, shieling body heat
- Highly reliable fire detection performance:
   Solution to the problem of the conventional fire detection sensors such as late detection and blind spot

### **Potential Applications**

- Smart home security module
- Real time surveillance car black box

## Development (TRL: 6)

#### **Core Patent**

- Security And Surveillance System And Method (安全和监视系统和方法), CN 201410150299.9; US 14/223797; KR 2013-0122862
- SECURITY MONITORING APPARATUS AND METHOD USING CORRELATION COEFFICIENT VARIATION PATTERN OF SOUND FIELD SPECTRUM, US 14/671209; KR 2014-0146266; GB 2015005360

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