# LICENSING OPPORTUNITY

## A WIRELESS WEARABLE SYSTEM TO MONITOR LEVELS OF FLUIDS IN THE LUNGS

**Published Patent Application** 

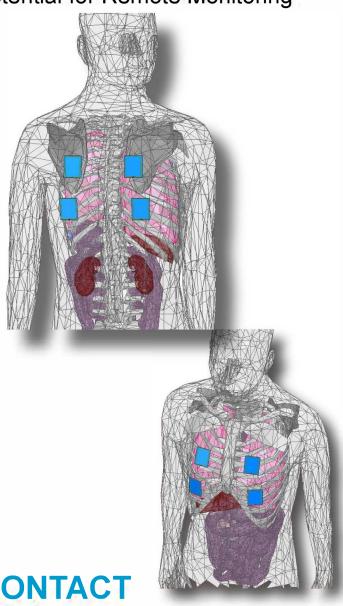
### **DESCRIPTION**

Pulmonary edema is a medical condition caused by the accumulation of excess fluid in the lungs. Monitoring the severity of this condition requires access of the patients to medical facilities with typically expensive medical imaging systems. For patients without easy access to such facilities or those who might require continuous monitoring, this could be a problem.

Detailed computational models have shown a correlation between the amount of fluid in the lungs and characteristics of a RF signal transmitted through the chest. Periodic measurements and processing of this RF signal using a wearable band around the chest or a fitted T-shirt with proper embedded antennas and other electronics can lead to a low cost system that monitors the status of pulmonary edema.

#### **BENEFITS**

Home Healthcare Mobile Device, Potential for Remote Monitoring



# CONTACT

**Technology Partnerships Office (TPO)** National Institute of Standards and Technology Gaithersburg MD 20899 licensing@nist.gov