

## Method for motion tracking during tomographic scanning

### **Disclosure Number**

200501566

### **Technology Summary**

This invention is a device for tracking motion of an unrestrained small animal during a tomographic scan with a rotating detector for computing three-dimensional image data. The device monitors and calculates the three dimensional position and orientation of the head at fast real-time rates with accuracies on the order of 0.1 mm in position and 0.1 degree for orientation. This motion data is calculated and stored during the scan in order to perform motion correction on the tomographic data. A working prototype has been developed for use with a SPECT scanner.

### **Inventor**

GODDARD JR, JAMES S

Engineering Science & Technology Div

### **Licensing Contact**

SPEIGHT II, MELVIN D

UT-Battelle, LLC

Oak Ridge National Laboratory

Room 143, 4500N, MS: 6196

1 Bethel Valley Road

Oak Ridge, TN 37831

Office Phone: (865) 241-6564

E-mail: [DSPEIGHT@ORNL.GOV](mailto:DSPEIGHT@ORNL.GOV)

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