

## Technique for Obtaining Two-Wavelength Differential-Phase Direct-to-Digital Heterodyned Holograms

### **Disclosure Number**

200100933

### **Technology Summary**

A method for obtaining two heterodyned digital holograms, one each at two different wavelengths, simultaneously on the same CCD camera is described. It is useful in a variety of distance measurement applications including high-resolution metrology for manufacturing, surface inspection of manufactured parts, and 3-D imaging of large objects.

### **Inventor**

SIMPSON, JOHN T

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)

Note: The technology described above is an early stage opportunity. Licensing rights to this intellectual property may be limited or unavailable. Patent applications directed towards this invention may not have been filed with any patent office.