

Request Information

Permalink

Portable Broadband Diffuse Optical Spectroscopic Imaging Device For Non-Invasive Tissue Characterization

Tech ID: 22158 / UC Case 2011-430-0

BRIEF DESCRIPTION

The diffuse optical spectroscopic imaging (DOSI) device is a tissue spectroscopy instrument designed to measure absorption and scattering properties of tissues. These absorption and scattering spectra are dependent upon the functional and structural composition of the tissue under study. The use of non-ionizing radiation probes the tissues below the surface non-invasively. While the idea of optical tissue spectroscopy is not unique, researchers at the University of California, Irvine have developed a unique compact modular platform that provides high portability yet retains the high information content of spectroscopic imaging of tissues.

SUGGESTED USES

Breast cancer detection, therapeutic monitoring, critical care medicine, exercise physiology, functional brain monitoring, vascular reactivity assessment.

ADVANTAGES

This networkable/scalable/compact/miniature multi-frequency and spectral broadband tissue spectrometer has been developed for greater portability that allows for imaging with full broadband information content.

PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Issued Patent	9,772,280	09/26/2017	2011-430

CONTACT

Alvin Viray
aviray@uci.edu
tel: 949-824-3104.



OTHER INFORMATION

CATEGORIZED AS

- » **Imaging**
 - » 3D/Immersive
 - » Medical
- » **Medical**
 - » Devices
 - » Diagnostics
 - » Imaging
 - » Research Tools
 - » Screening
- » **Research Tools**
 - » Other
- » **Sensors & Instrumentation**
 - » Medical
 - » Other

RELATED CASES

2011-430-0

UCI Beall
Applied Innovation

5270 California Avenue / Irvine, CA
92697-7700 / Tel: 949.824.2683



© 2011 - 2017, The Regents of the University of
California
[Terms of use](#)
[Privacy Notice](#)