Scanning Mechanism For Multimodality Intravascular Imaging Catheters

Tech ID: 32742 / UC Case 2020-618-2

BRIEF DESCRIPTION

See patent application publication no. US20210282642A16. The present invention is directed to a system for multimodal imaging through the use of a dual-rotational imaging catheter. The system may comprise a swept-source laser for providing a light source for OCT and OCE imaging, and an optical fiber coupler that splits said light source into one for a compensation arm and the other for the imaging catheter. The imaging catheter may comprise a rotary apparatus for a first scanning method, and a distal motor for a second scanning method. The dual-rotational model may allow for optimal performance of multiple imaging modalities. The imaging catheter may utilize optical imaging and acoustic imaging. A balanced photodetector receives input from the destinations of both light sources to offset DC noise. An US pulser/receiver is used for US imaging, a multifunction I/O module, a function generator, and an amplifier are used for generating an acoustic excitation force for OCE imaging.

FULL DESCRIPTION

SUGGESTED USES

ADVANTAGES

PATENT STATUS

Patent Pending

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OTHER INFORMATION

CATEGORIZED AS

» Imaging
» Medical

RELATED CASES

2020-618-2