



ABSTRACT

A device and method for intravascular ultrasound imaging. A catheter including ultrasonic apparatus is introduced into and may be moved through a bodily lumen. The apparatus transmits ultrasonic signals and detects reflected ultrasound signals which contain information relating to the bodily lumen. A processor coupled to the catheter is programmed to derive a first image or series of images and a second image or series of images from the detected ultrasound signals. The processor is also programmed to compare the second image or series of images to the first image or series of images respectively. The processor may be programmed to stabilize the second image in relation to the first image and to limit drift. The processor may also be programmed to monitor the first and second images for cardiovascular periodicity, image quality, temporal change and vasomotion. It can also match the first series of images and the second series of images.