

ULTRASOUND IMAGING & FIBER OPTIC PRESSURE SENSING COMPOSITE CATHETER FOR CARDIOVASCULAR DISEASE DIAGNOSTICS

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Integrating Intravascular Ultrasound Imaging (IVUS) diagnosis and Fiber Bragg Grating (FBG) optical pressure sensing techniques, this innovation provides a complementary cardiovascular diagnostic technology with simultaneous ultrasound imaging and Fractional-Flow-Reserve (FFR) functions. This integrated system can simultaneously "see" the narrow site of the cardiac blood vessel and gives the FFR value across this narrow site, and thereby supports doctors with the most accurate information to judge whether a heart stent surgery is required. This is a brand-new diagnostic technology with strong potential to be implemented in cardiac disease diagnostics.

NOVEL FEATURES

- * Faster and more accurate diagnostic process than separately using IVUS and FFR pressure sensing system
- * The integrated system allows for lower manufacturing cost

