FOCUSED ULTRASOUND ABLATION CATHETER AND DEVICE

ABSTRACT

Disclosed in the present invention are a focused ultrasound ablation catheter and a device. The focused ultrasound ablation catheter comprises a multi-chamber tube as a catheter body; a first ultrasound transducer, arranged at a distal end of the catheter body and electrically connected to a control part, the first ultrasound transducer being parallel to a central axis of the catheter body to be used for measuring a distance and a temperature of an inner wall of a blood vessel, thereby calculating an ablation target region and measuring a temperature of the target region for calculation of an output power of second ultrasound transducers and determination of an ablation end point; and at least two second ultrasound transducers, arranged at the distal end of the catheter body and electrically connected to the control part, the second ultrasound transducers and the central axis of the catheter body forming a set included angle, and the at least two second ultrasound transducers being symmetrical about the first ultrasound transducer for determining an ablation focus and performing focused ablation. By means of the catheter, energy transmitted by sound waves can be concentrated in a focused ablation region, and other regions are not ablated.

Fig 1.