

Abstract

The present invention discloses a motion control device of an ultrasonic treatment head focusing on a large-scale target area, which comprises a swing control module and an ultrasonic imaging probe control module, the swing control module comprises a vertical motion module, a left-right motion module and an axial motion module, the three motion modules control the probe control module to swing in two degrees of freedom of front-back and left-right and rotate axially respectively, and perform ultrasonic imaging on a target area; the vertical motion module comprises a lifting cross arm, an end of the lifting cross arm is provided with a first rotating disk, and a power input end of the first rotating disk is connected to a first swing motor in a driving manner; the left-right motion module comprises a metal connecting part that is rotatably connected to a disk portion of the first rotating disk, one side of the metal connecting part is provided with a second swing motor, and an output end of the second swing motor is connected to a power input end of a second rotating disk in a driving manner. Compared to the prior art, the present invention has the effects of simple structure, easy manufacture and cost reduction, where the irradiation treatment of different treatment units is achieved by swinging the treatment head, with novelty and creativity.