

ABSTRACT

Disclosed in the present application are a radiotherapy device and a control method
5 therefor. The device comprises a fixed base, a rotating frame, a treatment beam assembly,
and a fan beam CT assembly. The rotating frame is rotatably arranged on the fixed base.
The treatment beam assembly and the fan beam CT assembly are arranged on the rotating
frame. A rotation plane where the axis of a treatment beam of an accelerator treatment head
is located is coplanar with a rotation plane where the axis of a diagnostic beam of the fan
10 beam CT assembly is located, and the axis of the treatment beam and the axis of the
diagnostic beam intersect at the rotation axis of the rotating frame. By means of the rotating
frame, the treatment beam assembly and the fan beam CT assembly can be driven at the
same time. Both radiotherapy and CT imaging can be realized, and during CT imaging and
radiotherapy switching, a patient does not need to be displaced, thereby improving the
15 accuracy of imaging and treatment. When a treatment working state is switched to a
diagnostic working state, the treatment beam assembly is controlled to return to a preset
position, so that the device that rotates at a high speed is in a dynamic balance state, thereby
protecting the overall device.

20 [Fig. 1]