

ABSTRACT

A CT system and method thereof are disclosed. The system includes: a
5 conveyor mechanism; a first scanning stage configured to scan the object and
generate a first digital signal; a second scanning stage spaced from the first
scanning stage at a preset distance in a direction of the object's movement; a
processing device configured to reconstruct a CT image of the object at a first
image quality based on the first digital signal, and analyze the CT image; and a
10 control device configured to adjust a scanning parameter of the second scanning
stage based on an analysis result of the processing device to cause the second
scanning stage to output a second digital signal. The processing device
reconstructs a CT image of the object at a second image quality higher than the
first image quality at least based on the second digital signal. The system takes
15 full advantage of the distributed ray sources which replace the normal slip ring
technology.