

## **ABSTRACT**

The present disclosure provides a CT scanning system, including: a conveying device, configured to move a scanned object in a scanning channel in a predetermined conveying direction; a distributed ray source including  $m$  target points, where the  $m$  target points are configured to be activated in a predetermined order to emit ray beams,  $m$  is a positive integer greater than or equal to 2; a detector array configured to detect a ray emitted from the distributed ray source and passing through the scanned object, and to generate projection data according to the detected ray; and an image reconstruction device configured to generate a computed tomography image of the scanned object according to the projection data. The distributed ray source is configured to rotate around a first axis when the scanned object is scanned, and the first axis is parallel to the conveying direction. In the distributed ray source, at least two of the  $m$  target points are offset in a tangent direction, and the tangent direction is a direction extending along a tangent line tangent to a rotation direction of the distributed ray source.