

CT IMAGING SYSTEM

ABSTRACT

Embodiments of the present disclosure provide a CT imaging system, which relates to the field of ray scanning technologies. The CT imaging system includes: an imaging channel for placing an object to be imaged in an imaging process; M distributed X-ray sources arranged at intervals along a circumferential direction of the imaging channel, at least one distributed X-ray source including q target spots; N detectors arranged at intervals along the circumferential direction of the imaging channel, including first sub-detectors and second sub-detectors. The CT imaging system includes a plurality of imaging components, the imaging component includes at least one distributed X-ray source and at least one first sub-detector. In the same imaging component, the distributed X-ray source and the first sub-detector are arranged face-to-face in a radial direction of the imaging channel, target spots of the distributed X-ray source and at least a part of the first sub-detector are located in a same plane perpendicular to the first direction. At least one second sub-detector is provided on at least one side of at least one distributed X-ray source in the first direction.

FIG. 6