

ABSTRACT

The disclosure provides a scanning imaging system for security inspection of an object and an imaging method thereof, the system comprising: a conveying unit (101) configured for bringing the object (104) to move along a conveying direction; a plurality of radiographic sources (102) at one side of the conveying unit (101), being arranged successively in a direction vertical to a plane, in which the conveying unit (101) is located, and configured for alternately emitting ray beams to form a scanning area; a linear detector array (103) at the other side of the conveying unit (101), being configured for detecting first projection images, which are formed after the ray beams emitted by the plurality of radiographic sources (102) penetrate through the object (104), in the process of the object passing through the scanning area; an imaging unit configured for obtaining a first reconstructed image of the object (104) based on the first projection images of the plurality of radiographic sources. Technical solutions of the disclosure may eliminate artifacts in a reconstructed image of an object to be inspected.

[Fig. 1]