sources according to some embodiments of the present disclosure, in which two ray sources are located at a first scanning position. FIG. 4B shows a schematic diagram of an arrangement of a plurality of ray sources according to some embodiments of the present disclosure, in which two ray sources are located at a second scanning position. FIG. 4C shows a schematic diagram of an arrangement of a plurality of ray sources according to some embodiments of the present disclosure, in which two ray sources are located at a third scanning position. FIG. 4D shows a schematic diagram of an arrangement of a plurality of ray sources according to some embodiments of the present disclosure, in which a superposition state of two ray sources at first to third scanning positions is shown.

[0115] As shown in FIG. 4A, two ray sources 100 at the first scanning position may cover a first scanning angle. When the two ray sources 100 are located at the first scanning position, target spots 120 of the two ray sources 100 may sequentially emit X-rays in a predetermined order, while the conveying device 300 may transport the object to be inspected (shown as the shaded portion) through the inspection region. Then, the inspection system may complete a scanning process at the first scanning position.

[0116] After the scanning process at the first scanning position is completed, the two ray sources 100 may rotate around the rotation axis (for example, in a clockwise direction) to the second scanning position. As shown in FIG. 4B, the two ray sources 100 at the second scanning position may cover a second scanning angle. When the two ray sources 100 are located at the second scanning position, the target spots 120 of the two ray sources 100 may sequentially emit X-rays in a predetermined order, while the conveying device 300 may transport the object to be inspected through the inspection region again. Then, the inspection system may complete a scanning process at the second scanning position.

[0117] After the scanning process at the second scanning position is completed, the two ray sources 100 may rotate around the rotation axis (for example, in a clockwise direction) to the third scanning position. As shown in FIG. 4C, the two ray sources 100 at the third scanning position may cover a third scanning angle. When the two ray sources 100 are located at the third scanning position, target spots 120 of the two ray sources 100 may sequentially emit X-rays in a predetermined order, while the conveying device 300 may transport the object to be inspected through the inspection region again. Then, the inspection system may complete a scanning process at the third scanning position.

[0118] Through three scanning processes of the ~~three~~ two ray sources 100 at the first to