

HIGH SPEED DIGITAL RADIOGRAPHIC INSPECTION OF AIRCRAFT FUSELAGES

ABSTRACT OF THE DISCLOSURE

5 A system (10) and method for radiographic inspection of aircraft fuselage (12)s includes a radiation source (28) preferably located inside of the fuselage (12) and a radiation detector (32) preferably located outside of the fuselage (12). A source positioning system (30) is provided for moving the radiation source (28) longitudinally with respect to the fuselage (12), and a detector positioning system (34) is provided for positioning the radiation detector (32) in longitudinal alignment with the radiation source (28). The detector positioning system (34) also moves the radiation detector (32) circumferentially with respect to the fuselage (12). In operation, the radiation detector (32) is moved over the fuselage (12) in a
10 circumferential direction while the radiation source (28) illuminates an adjacent region of the fuselage (12) with radiation.

Figure 1.