

SYSTEMS AND METHODS FOR ULTRASONIC INSPECTION OF COMPLEX GEOMETRIES

ABSTRACT

A sensor probe (110) may include at least one ultrasound transducer (320) and a controller (350). The controller (350) may be configured to: receive, via the at least one ultrasound transducer (320), ultrasound signals (112, 114) from a component surface (125) of a component (120); detect a pattern indicative of a communication from an other sensor probe (110), associated with the component (120), based on the received ultrasound signals (112, 114); decode the received ultrasound signals (112, 114) to retrieve a message from the other sensor probe (110), in response to detecting the pattern indicative of the communication from the other sensor probe (110); obtain, via the at least one ultrasound transducer (320), ultrasound data indicative of ultrasound waves (112, 114) in the component (120), in response to the retrieved message; and cause data analysis for detecting defects in the component (120) to be performed based on the obtained ultrasound data.

[Figure 1]